# AX - I - DENT - AX

EMPLOYES' MAGAZINE

United States Smelting Refining and Mining Company
and Subsidiaries

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## REQUISITES
### Silver and Safety

◆

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Volume 16 April - 1931 Number 4

# When Father Played Baseball

**Dedicated to married men on the Salt Lake City office baseball team, who admit that they are "past" forty years.**

The smell of arnica is strong, and mother's time is spent
In rubbing father's arms and back with burning liniment.
The house is like a druggist's shop; strong odors fill the hall,
And day and night we hear him groan, since father played baseball.

He's forty past, but he declared that he was young as ever;
And in his youth, he said, he was a baseball player clever.
So when the business men arranged a game, they came to call
On dad and asked him if he thought that he could play baseball.

"I haven't played in fifteen years," said father, "but I know
That I can stop the grounders hot, and I can make the throw.
I used to play a corking game; the curves, I know them all;
And you can count on me, you bet, to join your game of ball."

On Saturday the game was played, and all of us were there;
Dad borrowed an old uniform, that Casey used to wear.
He paid three dollars for a glove, wore spikes to save a fall;
He had the make-up on all right, when father played baseball.

At second base they stationed him; a liner came his way;
Dad tried to stop it with his knee, and missed a double play.
He threw into the bleachers twice, he let a pop fly fall;
Oh, we were all ashamed of him, when father played baseball.

He tried to run, but tripped and fell, he tried to take a throw;
It put three fingers out of joint, and father let it go.
He stopped a grounder with his face; was spiked, nor was that all;
It looked to us like suicide, when father played baseball.

At last he limped away, and now he suffers in disgrace;
His arms are bathed in liniment; court plaster hides his face.
He says his back is breaking, and his legs won't move at all;
It made a wreck of father when he tried to play baseball.

The smell of arnica abounds; he hobbles with a cane;
A row of blisters mar his hands; he is in constant pain.
But lame and weak as father is, he swears he'll lick us all
If we dare even speak about the day he played baseball.

—Edgar A. Guest.

# AX - I - DENT - AX

VOLUME 16. SALT LAKE CITY, UTAH, APRIL, 1931 NUMBER 4.

## United States Smelting Refining and Mining Company

### and affiliated companies

*United States Smelting Refining and Mining Company*
Number One State Street, Boston, Massachusetts
Fifty-seven William Street, New York City
Newhouse Building, Salt Lake City, Utah

*United States Stores Company*
Newhouse Building, Salt Lake City, Utah
Dexter Horton Building, Seattle, Washington

*United States Fuel Company*
Newhouse Building, Salt Lake City, Utah
(Agents in all principal cities throughout the west)

*United States Fuel Sales Agency*
Newhouse Building, Salt Lake City, Utah

*Hanover Bessemer Iron and Copper Company*
Fierro, New Mexico

*Hammon Consolidated Gold Fields*
Nome, Alaska

*Fairbanks Exploration Company*
Fairbanks, Alaska

*Compania de Real del Monte y Pachuca*
Pachuca, Hidalgo, Mexico

*U. S. S. Lead Refinery, Incorporated*
East Chicago, Indiana

*Utah Railway Company*
Newhouse Building, Salt Lake City, Utah

*United States Smelting Refining and Mining Exploration Company*
Number One State Street, Boston, Massachusetts
Newhouse Building, Salt Lake City, Utah

*U. S. Smelting Exploration, S. A.*
Pachuca, Hidalgo, Mexico

*Central Research Laboratory*
Cambridge, Massachusetts

*Customs Agent Office*
Apartado Number One Hundred Seven
Vera Cruz, Mexico

# Silver and World Trade

**By W. H. EARDLEY, Assistant Manager**
**United States Smelting Refining and Mining Company**
**Salt Lake City, Utah**

For many decades prior to 1873 silver had sold for about $1.20 per ounce.

From 1871 to 1873 silver was demonetized in the Scandinavian countries, the United States and Germany and thus was laid the foundation for a series of panics and depressions such as the world had never known.

In 1878 France, Britain, Italy and Greece closed their mints to silver resulting in further trade depression, bank failures, and monetary International Conferences. The period from 1875 to 1896 was one of great concern among the nations of the earth for populations were increasing and the production of gold and silver decreasing. In 1893 the Sherman Act, which had been passed in 1890 for the purchase of four and one-half million ounces of silver, was repealed. The demonetization of silver by various governments; the closing of mints to the free coinage of silver, including the Bank of India; the repeal of the Sherman Act; and the imposition of a duty of 5% on silver by India created conditions which rocked the world's whole economic structure and culminated in the panic of 1896.

In 1896 there was but $11.00 per capita in actual money in the United States and $6.00 of that was in banks. The country did not have sufficient money to maintain any semblance of prosperity. So serious was the situation that the country was threatened with revolution. The discovery of the African gold fields a few years ago, where production reached a little more than three and one-half million ounces by 1899, saved the situation.

In 1907 the Indian Government again ceased its purchases of silver (silver dropping from 65c to 48c) and we are all familiar with the conditions obtaining in the latter half of 1907 and first part of 1908.

Gold and silver have both been used as money throughout the history of the world, gold having constituted the basis of exchange in the Occidental countries and silver the basis of exchange in the Oriental countries. Approximately 80% of all silver produced is used as money, so that any change in conditions affecting the value of silver as money has a far-reaching effect on world economics.

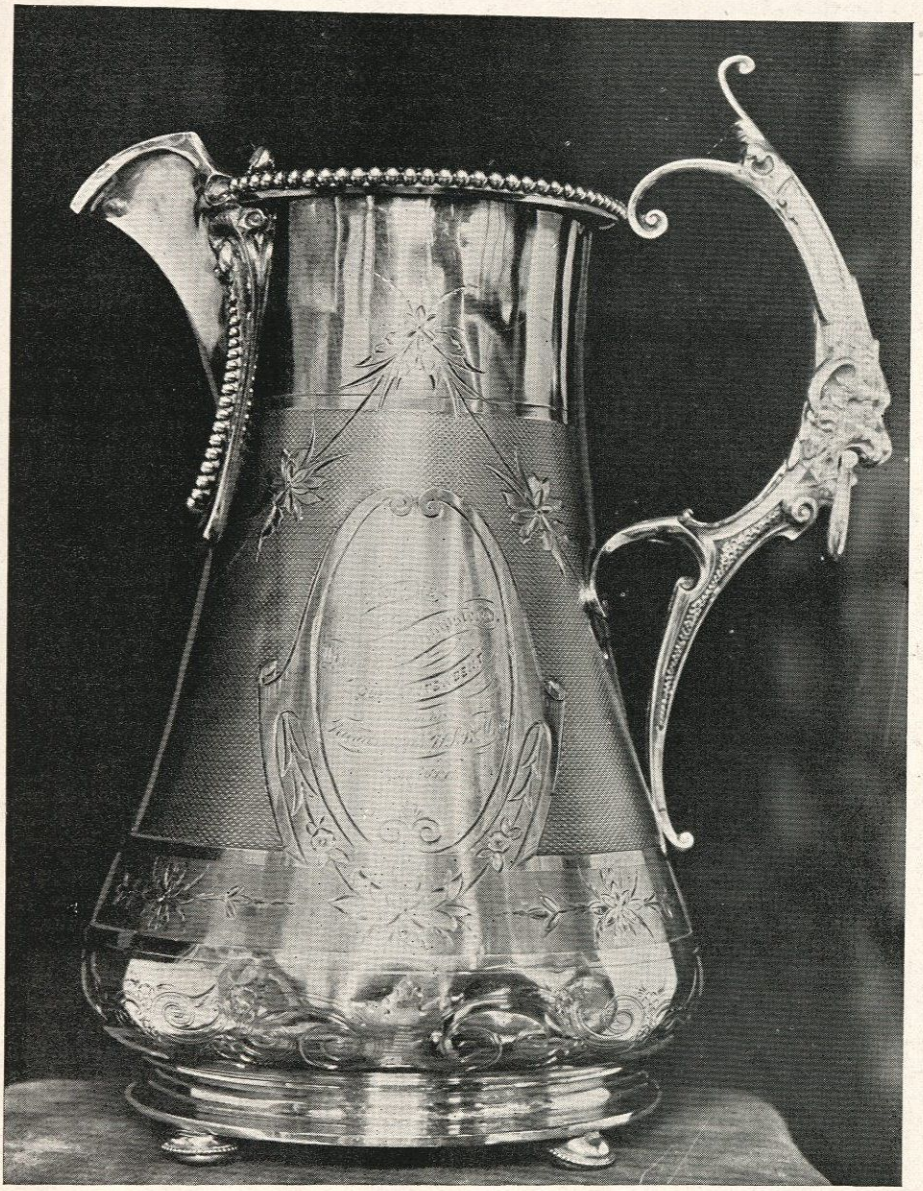
To fully understand the effect of silver on the world's trade one must have some idea of conditions prevailing in the Orient which particularly affect the Oriental trade. For example, the Indian monsoon coming in from the sea in September brings the indispensible rainfall to the cereal and seed-growing areas of southern and western India, while the late monsoon in December and January brings the invaluable rain to the wheat-growing regions of northern India, the rice fields of Burma and Bengal and the jute areas and cotton fields of Bombay. If the monsoons are favorable then the people have products to export and with their surplus they buy silver.

The Hindoo marriage season also materially affects silver. The marriage season is in May and as many marriages as possible take place about that time. Every bride, no matter how poor her people are, or how poor the people of the bridegroom may be, receives a dowry of gold and silver. This trade is anticipated by the gold and silversmiths who purchase gold and silver in advance as do automobile manufacturers in their purchases of lead and copper.

Civil war in any of the Oriental countries has its effect upon silver and in turn all world markets. While civil war creates a demand for military purposes and causes private hoardings to go into hiding or to be sent to treaty ports for safe keeping, a state of war curtails also production of exportable products and with nothing to export a nation has nothing with which to buy. This naturally lessens the purchasing power of the people at war and decreases the demand for silver as well as all other products produced in foreign countries. Floods, famine, and pestilence also reflect a decreased demand for silver.

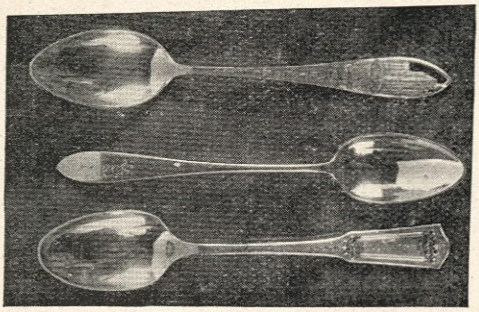
A review of the events of the last ten years as they affect silver and world trade indicates the following:

In February, 1920, the price of silver in London reached its highest point, namely, 89½ pence or $1.77 per ounce. To prevent the illegal melting of coins whose intrinsic value exceeded the face value by 33%, the



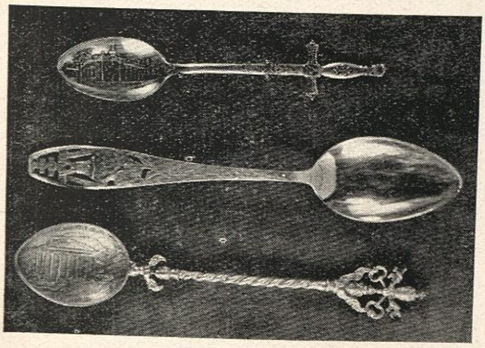
**Inscription: "To the Hon. C. H. Hempstead, Superintendent, from his Friends in the U. S. Br. Mint, January 1, 1861." This piece of coin silver, manufactured in San Francisco by J. W. Tucker, was presented to Mr. Hempstead upon his retirement as superintendent of the U. S. Mint, San Francisco. Mr. Hempstead came to Utah in 1862 and was prominent in early affairs. He was the father of Miss F. V. Hempstead, with this company for more than thirty years.**

English government, on March 31, 1920, passed a law reducing the silver content of subsidiary coinage from .925 fine to .500 fine to be effective the following December. In 1921 other European governments followed the lead taken by Great Britain in debasing their subsidiary coinage and the British mint commenced selling surplus silver from debased coins.



**Commemorative Silver Spoons: Upper, from L. D. S. Temple, Salt Lake. Center, from First L. D. S. Temple, Kirtland. Lower, from L. D. S. Temple, Nauvoo.**

The action of the European governments at that time has resulted in a difference in their consumption of silver for subsidiary coinage of an average of approximately 16 million ounces per year. In June, 1920, the United States government started buying silver under the Pittman Act which helped out the situation while the Pittman Act was in effect. A good demand from India and fair exports from China in 1923 prevented any drastic decline that year despite the fact that the British mints and continental Europe continued to sell silver. A fair demand from Europe in 1924, a good monsoon in India in 1925 and a demand from China during the same year operated to maintain fair prices.



**Commemorative Silver Spoons: Upper, Washington's Sword, Mount Vernon. Center, Franciscan Mission, California. Lower, Bowl Shows Pantheon, Rome.**

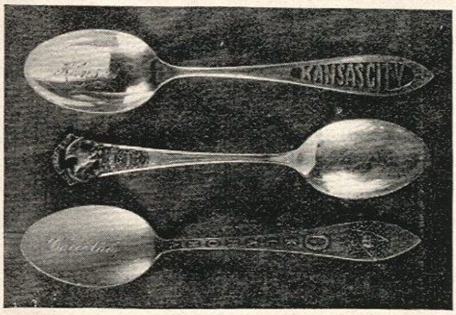
In the summer of 1926 a commission appointed by the Indian government recommended the adoption of the gold standard. Silver was then selling at 65c per ounce. After the publication of this report silver started to decline and by December of 1926 reached 53½ cents. In 1927 the Indian government started to sell silver and has continued to sell from time to time up to the present. Although India sold 22½ million ounces in 1928, the imports to that country, in excess of the exports, were nearly 82 million ounces, so that India was still a large factor in the silver market.

**Silver hand-wrought formal Navajo necklace, showing crescent and squash blossoms. Similar pieces were wrought by Navajo silversmiths long before the coming of the Spaniards.**

In the meantime, civil war was being carried on in China, where the conditions became so serious that silver stocks started to drift from the interior to Shanghai for safe keeping, reaching unusually high proportions by 1929 and causing a lessened demand by China. The

Chinese wars naturally affected production, reducing the exportable surplus, which, in connection with the drop in the price of silver, greatly reduced the purchasing power of the government and the people, reflecting itself in the decline and cancellation of China's orders for foreign goods and the sale of silver by China to meet its trade balances. The above factors resulted in a decrease in the price of silver by the end of 1929 to 48.47 cents.

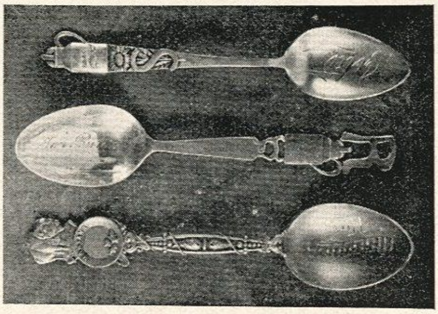
Early in 1930 the Indian government placed an import duty on silver of between nine and ten cents per ounce, making the sale of silver to India practically impossible except at great hardship and financial sacrifice, and then in the spring of 1930 the Kemmerer Commission recommended some type of gold standard for Indo-China. The action of the Indian government, taken in connection with the psychological effect of the Kemmerer report, caused the silver price to crumble, recently declining to below 26c per ounce.



**Souvenir Spoons: Upper, Kansas City, Missouri. Center, La Harpe, Kansas. Lower, Checotah, Oklahoma.**

The drop in the price of silver from 65c in 1926 to 26c in 1930, decreased the purchasing power of the Oriental countries, which have always used silver as a basis of exchange and inasmuch as the Oriental countries contain over half the world's population, this decline had disastrous effects on all world industries. The Orient was unable to purchase from the Occident the things the Occident produced in abundance and the Occidental countries found themselves with large stocks of unsalable commodities, resulting in a drastic drop in commodity prices and naturally decreasing the purchasing power of the Occident itself, so that they could not in turn purchase the things which the Orient produced in excess. This condition has resulted in a world industrial crisis.

Were we to treat the body politic as we would the human body, we would remove the causes of the present condition and thereby escape the effects. This would involve:



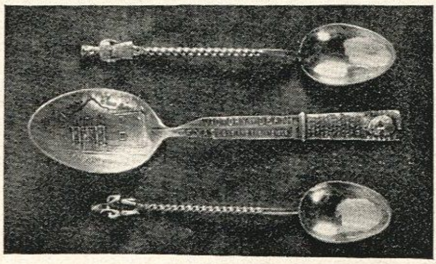
**Silver "Design Spoons." Upper, "Kan-S," Iola, Kansas. Center, "R-Kan-Saw," Arkansas. Lower, Miner's Pan, Missoula, Montana.**

First: All European and other countries placing their subsidiary coinage on a basis of .925 fine, instead of .500 fine, as at present, and calling in all other coins.

Second: The Indian government removing the present import duty on silver.

Third: All major governments, including the Indian government, discontinuing the sale of government silver for a period of years or until silver reaches a certain price to be agreed upon.

Fourth: The United States, Great Britain, France, Japan and other countries cooperating in bringing order out of chaos in China, thus stimulating the demand for silver in that country.



**Commemorative Silver: Upper, Igorot Woman; Mexican Silver. Center, Bowie Knife, Alamo. Lower, Igorot, Burial Position, Work of Igorot Silversmith.**

With order and commerce reestablished, agriculture and industries can revive. The movement of goods will be stimulated by the prevailing peace and security, the export trade can flourish and the demand for silver automatically increase.

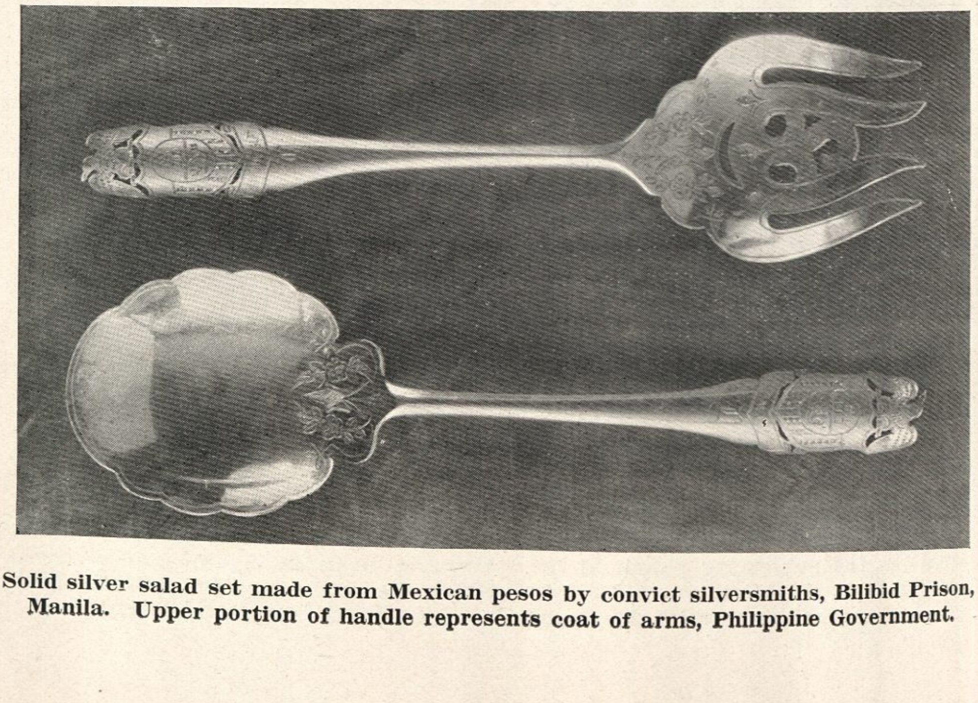
There is one other solution to the problem. That is to call an International Conference to fix the price of silver at a certain ratio to gold and have all civilized countries accept silver in payment of international balances, thus giving it a standing similar to that of gold. If the ratio were, say, 30 to 1, this would mean a price of about 69c for silver. This would have the effect of immediately doubling the purchasing power of the Orient and would have marked beneficial effects on Mexico and other silver-producing countries. The Orient and other countries would then be in a position to place orders for material and equipment they so much need and Occidental countries having sold their surplus goods would be in a position to place orders in Oriental countries for their surplus and the wheels of industry would again turn in the right direction.

The argument most frequently set forth in opposition to such a plan is that there would probably be an overproduction of silver and that unlimited quantities would appear, causing greater disaster than at present. The total production of silver in the world since 1493 is but fourteen billion ounces. As near as can be estimated there are but seven billion ounces of silver available in the world at the present time. If all of this seven billion ounces of silver were coined into money or held by the governments for coinage purposes, its value would be less than five billion dollars at 69c per ounce. Add this to the world's gold supply of ten billion dollars and you have a total of less than 15 billion dollars, or less than $10.00 per capita.

The greatest amount of silver produced in any year of the world's history is 261 million ounces, 20% of which goes into the arts, 80% used as money. Assuming that a fixed price of silver increased the production of silver by 50%, which is, I think, impossible, and that the entire increase was used as money, we would have but 325 million ounces per year available for use as money, which at 69c per ounce would be approximately 225 million dollars. It would take twenty-two years, assuming no loss whatever, to provide another five billion dollars of silver, which would then provide the world with about $12.00 per capita.

The United States has today in actual money $46.00 per capita, so it would probably be several hundred years before the world would have as much money per capita as the United States has today.

Again, there is not enough gold in the world with which to do business. The



**Solid silver salad set made from Mexican pesos by convict silversmiths, Bilibid Prison, Manila. Upper portion of handle represents coat of arms, Philippine Government.**

total monetary stock of gold in the world today is roughly 500 million ounces, having a value of ten billion dollars, or less than $6.00 per capita. The world production of gold is about twenty million ounces per year at the present time, ten million of which comes from Africa. Those well-acquainted with conditions in Africa estimate that the present production can be maintained only for the next five years and that by 1936 there will be a decrease of from 30% to 48% in African production. The United States is the second largest producer of gold. It reached its peak in 1915, when it produced 4,823,000 ounces of gold. Its production in 1929 was but 2,128,000 ounces, or but 46% of its 1915 production. Gold production is decreasing in all countries except Canada and Japan.

The normal increase of the world's commerce is 3½%. The present added gold supply to the world's monetary stock, even with present gold production, is 2.2%, a deficiency of 1.3%. These figures sound small but when the value of the world's trade is considered the figure is enormous. The result has been and will be a fall in commodity prices.

It is therefore very apparent that our credit structure if based on gold only, will be subjected to greater and greater strain until possibly the whole structure will fall. Gold is wholly inadequate for distribution in Oriental countries where the savings are small and gold coins are not made in small enough units for general use. It is very evident that gold must be supplemented by some other element and silver is the only other one in which the people of the world have faith, it having been used since the beginning of time by the larger part of the world's population.

# East Chicago Notes

**E. C. SPENCER, Correspondent**

The safety meetings that were sponsored by the Safety Committee of the East Chicago Chamber of Commerce during the fall and winter season, came to a close March 12th. The attendance from our plant was very good, which shows the "Spirit of Safety." The speaker of the evening was Mr. Richard Verner, whose subject was "Your Job in Fire Safety."

Ellen Carlson and Evelyn Kerr were among those present at the Great Northern Theater to enjoy the operetta "The Three Little Girls."

A class of twelve men has been organized to be instructed in artificial respiration at our plant. Mr. Thomas King, of the East Chicago Fire Department, has been appointed instructor. The men who attended the first instruction meeting took great interest in the work.

## A FEW EPITAPHS

At fifty miles drove Ollie Pidd;
He thought he wouldn't skid—but did.

At ninety miles drove Edward Shawn;
The motor stopped—but Ed kept on.

Lies slumbering here one William Lake;
He heard the bell but had no brake.

Please toll the bell for Thomas Earl;
For as he drove he hugged his girl.

Rest in peace, poor Henry Slicker;
You were quick but the train was quicker.

—Contributed by Utah Railway

**Three half dollars issued by U. S. Government. Left to right, Oregon Trail; Stone Mountain Monument; Sesquicentennial. Mexican currency made from Mexican silver is the most widely circulated money in the world. Right, "Mex" 50c piece.**

# We Believe It

### A Big Contract

Mr. W. H. Wattis, a resident of Ogden, Utah, but well known to Salt Lakers and people generally throughout the intermountain states, has just signed a contract to build the Hoover (Boulder) Dam for approximately $48,000,000. Mr. Wattis has been at the head of the Utah Construction Company for many years. At present he not only represents that company, but also five other companies which have affiliated with the Utah Construction Company to build the dam. In a newspaper interview, Mr. Wattis stated that this was the biggest contract for construction work ever given out in the United States.

### A Bigger Contract

Those who undertake to furnish highways and streets, police and fire protection and sanitation, prohibition enforcement, street lighting, water, advice to and bulletins for farmers, along with a multitude of other things embraced in Federal, state and city government, require $12,000,000,000 each year to fulfill their contract. Of this the Federal government expends about $4,000,000,000. Sometimes people make caustic comments about the expenses of the President of the United States. President Hoover requires much less than most monarchs in countries with far less riches than the United States. His salary and that of his secretaries, clerks, etc., cost less than half a million dollars a year. Any large department of the government costs more and some independent commissions, appointed to do a specific and current piece of work, take more from the budget than does President Hoover. The Army and Navy cost about $814,000,000 a year and payments to veterans cost a billion more. But this does not include all the costs of wars, past or future. The most conservative estimates allot 70% of the total national budget to costs of wars, past and future, while others place the figure as high as 74%. Anyhow the total is about $2,700,000,000, and it is safe to assume, therefore, that nearly three-fourths of our national budget is used for war purposes. Some caustic remarks are also directed toward prohibition enforcement which costs about $16,000,000 a year, less than one-half of 1% of the $4,000,000,000. Salaries of Congressmen and other expenses in connection with Congress cost about 56 times as much as those of President Hoover and his immediate staff. The Treasury department is the biggest spender outside the Army and Navy, but this department collects income taxes and is presumed to make money, theoretically speaking, of course. The expenses of the Agricultural department, about $250,000,000 a year, does not yield any revenue directly to the government, but agriculture is a $12,000,000,000 industry and anything which advances it is probably money well spent. The State department, presumed to do quite heavy thinking, costs about $17,000,000 a year, while the Labor department, typifying manual labor spends about $13,000,000.

### Boiling and Filtering

"Keep it short" is not only a correspondent's slogan in good offices, but an absolute rule in the daily newspaper. Millions of sentences are rattled off on typewriters in reporting rooms which never appear in print and billions of sentences in circular letters, advertising copy and even correspondence could be eliminated each year without any painful results so far as information goes. In fact clarity might result from elimination and condensation. Some things common to both correspondents and reporters are: redundancy, circuitous writing, mixed tenses, misspelling, split infinitives, misuse of words, use of overworked terms, incorrect titles and incorrect addresses. The average 300-word story as turned in by the average reporter is reduced about 120 words although some 10 to 20 are often included to convey to the reader what the reporter is trying to say. Here are some of the bewhiskered phrases: "regular weekly meeting," "usual custom," "widow woman," "widow of late," "the smile on his face," "tiny babies," "present incumbent," "completely destroyed," "entirely completed." "Secure" is used for "obtain," "over" and "above" frequently usurp "more than." "Remains" is used to designate the "body" of a dead person, while amphibian planes are made to "land" on water while they could just as well "alight." In reference to mining companies, men are frequently said to be "entombed" when they are "trapped," and the jurors who try such cases are miscalled "talesmen;" and a trial is not "in-

# Whether You Do or Not

augurated," it "starts." Indecent language, vulgarity and personalities are excluded from good newspapers as well as from the best correspondence.

### Rattling Old Bones

Most paleontologists would welcome the use of a great giant (mastodon fire hoze nozzle) followed by a dredge to exhume and bring to light remnants of past faunas and floras. Mr. Peter Kaisen of the American Museum of Natural History effected such an arrangement with the officials of the Fairbanks Exploration Company with the result that our scientific knowledge of past life in Alaska has been greatly enriched recently and there is every reason to believe that future work will result just as beneficially to science. Mr. Kaisen, Mr. Otto W. Geist and representatives of the Alaska Agricultural College sort out the bones, the fossil leaves and seeds and the tusks and the skulls as the frozen dungeon is cut away and the dredger roots for gold. Thar's bones in that 'ar muck.

### A Great Newspaper

The New York Times was established in 1851—80 years ago. Adolph S. Ochs, publisher, recently made some statements regarding the Times. Before doing this he frankly stated that he was "not going to be too modest." According to Mr. Ochs, the payroll of the Times is more than $175,000 a week—nearly three-fourths of a million a month. There are more than 100 executives connected with the paper whose salaries exceed $10,000 a year. The average for all employes is $50 a week. In 1930 more money was spent for welfare work than the total income of the New York Times in 1896—35 years ago. About 100,000 words are received each day by cable and wire at an expense of $10,000 a week. Mr. Ochs regards advertising as news and when it isn't news, advertising is wasted; advertising has to compete with reading matter to get the attention of the reader. Advertising matter in some special locations in the Times, like the second or third page, costs $3 an agate line. For the benefit of readers, we will state that agate lines are of "pigmy" size, a square inch of which occupies less than one-fifth that of typewriter type. The line is only two inches long and the actual silver value of this line is about $9. Here's a hint to advocates of the use of silver—use sterling for type metal rather than lead, tin and antimony. Many department stores in New York spend $1,000 a day for advertising and six of these stores spend nearly two million a year. Representatives in the principal cities throughout the world supplement Associated Press news. If something is happening in Australia and a wire breaks over the Rocky Mountains, the news is wired via the Indian Ocean, Suez Canal and across the Atlantic Ocean if necessary. Mr. Ochs was 73 years old on March 12th. He is alert and active and gives personal attention to the management and operation of the Times. He declares that it is better to "feel 70 years young than be 40 years old."

### Only Two Per Cent Pay Income Taxes

There are in the United States 120,000,000 people, but 98% pay no income tax to the Federal government. Approximately 2,500,000 people bear the direct tax burden of the government. About 900,000 of the two and one-half million have incomes of more than $5,000 a year, while the remainder, some 1,600,000 individuals have incomes less than $5,000 a year. About one-half million corporations make income tax returns but less than one-half of them make any contributions for the reason that they show no profit.

### The Times

In the midst of unemployment and distress, it should not be overlooked that there are approximately 44 million people working and drawing as much pay as they ever did. These 44 million people earn $25 a week on the average and that means that one billion one hundred million dollars are placed in circulation every week. There are twenty-eight billion dollars in the savings banks which belong to the workers. Thus there are five times as many people employed as are unemployed and enough money in savings banks to keep the unemployed at work at a living wage for two and one-half or three years, if no deposits were made. Just what sort of a vampire do we need to entice these twenty-eight billion out of the bank? Is it Mr. Eardley's silver circulation increase; fewer days labor per week; shorter hours; greater consumption; less production; lower tariff; higher tariff; more exports; some other remedy? We leave it to our readers.

# Utah Railway Company Notes

### Martin, Utah

**A. J. KIRKHAM, Correspondent**

Freight Auditor F. H. Greene from the general office spent several days at Martin during the month in connection with station accounts.

Mr. J. F. Wible, formerly in the trainmaster's office of the D. & R. G. W. at Helper, Utah, was employed as stenographer in the superintendent's office at Martin, Utah, February 1.

Bill clerk, A. L. Tucker, was called to Fairview, Utah, February 15, on account of the death of his mother-in-law, Mrs. Bessie Cheney.

On account of force reduction at Martin and Kingmine, Operator O. W. Evans at Martin was displaced by Operator H. H. Hagan from Kingmine on February 9.

Ditcher Engineer and Mrs. R. L. Lovelace are taking advantage of a trip to Parsons, Kansas, during the period of time Mr. Lovelace is off duty on account of reduction in force.

Section Foreman C. K. Dragonas is taking a thirty-day leave of absence in order to visit relatives in Jefferson City, Missouri.

Chief Engineer G. W. Rathjens in company with Assistant Engineer Harmon were in the district during the month in connection with anticipated work to be undertaken during the coming season.

The M. P. & C. Department at Martin have been engaged in overhauling and putting in good condition motor, hand, and push cars, work train equipment and outfit cars in order that this class of equipment will be available when needed.

Messrs. A. L. Dorsey of the Accounting Department and T. A. Ream, storekeeper at Provo, were at Martin during the month handling and disbursing various materials.

General Foreman L. B. Smith was confined to his home during the latter part of the month due to a severe case of "flu". Master Mechanic Somo spent his time at Martin during Mr. Smith's absence.

On March 2nd Mr. A. C. Shields, Vice President and General Manager of the Denver and Rio Grande Railroad Company, Mr. I. H. Luke, retired General Manager, Mr. E. W. Deuel, Assistant Superintendent, Mr. H. C. Cosand, Division Engineer, and Mr. J. R. Loftis, Trainmaster, were visitors at our Martin office, making an inspection of our yards and engine house.

We are in receipt of advice that our 1931 treated-tie requirement will be shipped during the latter part of February or fore part of March. All ties will be unloaded at available points in preference to being unloaded at Martin or Kingmine.

Mr. Joseph Bailey, father-in-law of Material Clerk E. S. Bray, died very suddenly at Mr. Bray's home on March 6th. The remains were shipped to New Castle, Colorado, March 7th, for burial. Mr. and Mrs. G. H. Patterick accompanied Mr. and Mrs. Bray upon their sad mission. Our sympathy is extended to the bereaved.

March 9th, Agent J. E. Johnson, returned to service at Martin after approximately three months leave of absence for the purpose of bettering his physical condition.

Mr. C. G. Bath, who has acted as relief agent at Martin for the past three months, transferred in service to second trick operator at Hiawatha, this displacing Operator E. T. Tucker, who we understand intends to operate a grocery store and fruit market in Salt Lake City during the summer season.

Mr. F. H. Greene of the General Office was at Martin March 9th in connection with the transfer of the Agency from Agent Bath to Agent Johnson.

On March 10th Engineer W. B. McKelvey left for Los Angeles for an indefinite visit with his mother who resides in that city.

March 10th, the B. & B. Force was reestablished at Martin, this force having been out of service since January 6th, due to business depression. Considerable light repair work was needed to various structures and thus the necessity for a force of this kind, which is now employed three days per week.

Vice-President and General Manager G. S. Anderson spent several days in the Martin-Kingmine district during the latter part of the month.

A total of 10,000 treated ties for our 1931 requirements have been received during the past month and unloaded at various points along the line and in the yards at Martin, Kingmine, and on the National Coal Railway and Spring Canyon branches. Section forces were reduced to a minimum during the winter and the work of heavy tie renewal has not begun.

Mr. E. L. Morgan, brakeman on the Kingmine mine-run, unfortunately ran a sliver in the palm of his right hand on February 23rd. Infection set in and Mr. Morgan has had considerable trouble and will be out of service for probably thirty days.

Agent A. Opperman at Kingmine announces that on February 17th "Condes Bonnie Lassie," his thoroughbred Boston bulldog presented herself with a male heir and the new arrival has been christened "Opp's Own." Mr. Opperman is specializing in the handling of this breed of dogs and anticipates being able to have some on the market at a later date.

The usual yearly performance of reweighing and restenciling of cars, (an A. R. A. requirement) has been prosecuted with vigor by Motive Power & Car Department forces at Kingmine during the past month and a large number of cars have passed over the scales with weights of each verified and corrected.

Operator H. H. Hagan, who has been employed as third trick operator at Kingmine during the past season, left for his former home in Arkansas for a short visit. The position he held was temporarily abolished on February 9th.

Conductor R. G. MacKenzie is now assigned to the National Coal Railway mine-run due to there being but three main line crews in service. "Mack" always anticipates vacationing for three to five months at Martin, but from the present outlook he will be in this district for a considerable period this season.

Word was received of a serious illness in the Maloney family, and Engineer Mike Maloney, in company with his sister, left for Tucson, Arizona, on March 23rd.

The annual inventory of all unapplied materials will be taken during the latter part of April, the usual annual performance of the Utah Railway. All materials are now being carefully stacked, checked and stenciled and put in readiness for the inventory in order that a quick check-up can be made.

## U. S. EMPLOYES BENEFIT FUND

The following claims were approved in February, 1931, at the Midvale Plant:

| | |
|---|---|
| Thomas C. Williamson, 49 days, final pay | $14.00 |
| George Bird, 9 days, final pay | 6.00 |
| Wm. Henry Brown, 33 days, final pay | 30.00 |
| John Jackson, 30 days, final pay | 27.00 |
| Julia Virginia Reading, contribution | 4.00 |
| Eldred A. Lloyd, 9 days, final pay | 6.00 |
| Clarence Goff, 6 days, final pay | 3.00 |
| John H. C. Gosman, 26 days, final pay | 23.00 |
| Ray Jackman, 8 days, final pay | 5.00 |
| Joe Mismash, 25 days, final pay | 22.00 |
| James H. Gaskill, 9 days, final pay | 6.00 |
| Joe De Cisto, 8 days, final pay | 5.00 |
| Chas. Madson Drown, 24 days, part pay | 24.00 |
| Joe Mikich, 12 days, final pay | 9.00 |
| Nick Dedes, 54 days, final pay | 51.00 |
| John Schreier, 9 days, final pay | 6.00 |
| Bert Ray, 8 days, final pay | 5.00 |
| Total | $246.00 |

## HER ERROR

"I tell you I won't have this room," protested the old lady to the bellboy. "I ain't goin' to pay my good money for a pigsty with a measly little foldin' bed in it. You think jest because I'm from the country—"

Disgusted, the boy cut her short. "Get in, mum. Get in. This ain't your room. This is the elevator."

# Safety

## A COMMON DENOMINATOR IN COAL AND METAL MINES

**By D. D. MUIR, Jr.**

**(Article published in Annual Transactions, National Safety Council, 1928, revised for this issue of the Ax-I-Dent-Ax)**

As long as mines operate there will be accidents and just so long it becomes the duty of every operator not only to use known precautions and preventatives but to use his ingenuity to devise new ones that will fit the particular case. There is not now nor will there ever be a fixed set of safety rules or regulations fitting all cases that will prove a 100% eliminator. The problem of the operator is to approach that goal as nearly as possible from both humanitarian and economic viewpoints.

Safety in general is considered to mean freedom from danger or hazard and elimination of causes of such. Industries of today, largely mechanized, present far greater hazard to the worker than formerly, not from the standpoint of unit production but from exposure. Transferred underground, industry becomes more hazardous, many conditions existing there are not found on the surface. The mine operator is beset with such additional danger for his employes as lack of light, fall of roof or rock, electrical apparatus of a necessity in near proximity to the work, use of explosives, and in coal mines the ever present fear of gas or coal dust explosion. By just this degree his problem calls for additional precaution and renders mining for an industry of its magnitude the most hazardous of all.

It is nearly impossible and thoroughly impractical to attempt listing all causes contributing to accidents. The majority may be, however, confined to relatively few, as follows:

**Metal Mines**

| | |
|---|---|
| Falling rock | 31.79% |
| Particles in eyes | 13.66% |
| Miscellaneous | 8.84% |
| Falling | 6.99% |
| Handling drills and other tools | 6.10% |
| Lifting or overstrain | 5.30% |
| Transportation system injuries | 5.27% |
| Falling timber | 5.16% |
| Struck by axe or pick | 3.45% |
| Injuries by nails | 2.36% |
| Cut or pinched by rock | 2.36% |
| Falling ground | 1.90% |
| Hands caught | 1.82% |
| Riding on locomotive or cars | 1.28% |
| Handling material | 1.22% |
| Acid water infection | .88% |
| Carbide burns or explosions | .81% |
| Blasting and handling explosives | .81% |
| | 100.00% |

The above constitutes a nine-year record of a Utah metal mine employing in excess of 300 men.

**Coal Mines**

| | |
|---|---|
| Falls of roof | 21.5% |
| Fall of face or pillar coal | 18.0% |
| Loading mine cars | 15.0% |
| Mine cars and locomotive transportation | 12.0% |
| Miscellaneous | 11.0% |
| Foreign body in eye | 4.0% |
| Handling tools, axes, bars, etc. | 3.5% |
| Falling timber | 3.5% |
| Falling | 3.5% |
| Handling machinery (other than mining) | 3.0% |
| Mining machines | 2.0% |
| Electricity | 1.0% |
| Nails, splinters, etc. | 1.0% |
| Explosives | 1.0% |
| Mine explosions or fires | 0.0% |
| | 100.0% |

The above is a three-year record of three Utah coal mines employing in excess of 600 men. While conditions in these two types of mines differ widely from other mines in various sections of the United States, they are representative of Utah conditions and may be used as criteria for comparison of types of accidents in metal and coal mines.

Eliminating explosions and fires in coal mines, by far the greatest hazard in both types from the standpoint of efficiency is falling rock or coal. From the standpoint of severity of injury and loss of time, this same hazard is the greatest offender, followed closely by falls of persons in metal mines and loading of cars in coal mines. Any similarity of hazard or severity ends at this point, as might be expected, due to widely different conditions.

The question comes to mind as to which type of mine is the more hazardous. Accident records for coal and metal mines are compiled so differently as to make accurate comparison difficult. The Bureau of Mines, however, after considerable effort, has compiled statistics which afford a comparable basis. For the years 1913 to 1925, inclusive, these figures show 4.38 fatalities in coal and 3.53 fatalities in metal mines per one thousand 300-day workers. The same figures for the year 1925 alone show 4.65 fatalities in coal mines and 2.99 fatalities in metal mines on the same basis.

In 1927 the Bureau of Mines, for the third consecutive year, conducted a safety contest among 250 mines and quarries. Among the bituminous division 45 mines reported. In the rating one Utah mine was fifth, another nineteenth and another forty-first. The average frequency rate for the 45, based on fatal, permanent and other lost time accidents per million man hours of exposure, was 97.32. The severity rate, based on number of days lost from accidents per one thousand man hours exposure, was 15.73. The three Utah mines referred to above belong to the United States Fuel Company, Salt Lake City, Utah. Their record for 1925 to 1930, inclusive, on the same basis follows:

**Frequency Rate**

| | Mine No. 1 | Mine No. 2 | Mine No. 3 |
|---|---|---|---|
| 1925 | 141.672 | ............ | 136.463 |
| 1926 | 130.031 | 88.159 | 84.696 |
| 1927 | 90.789 | 122.449 | 77.688 |
| 1928 | 105.648 | 118.841 | 85.799 |
| 1929 | 163.962 | 129.504 | 86.475 |
| 1930 | 94.327 | 90.600 | 59.263 |

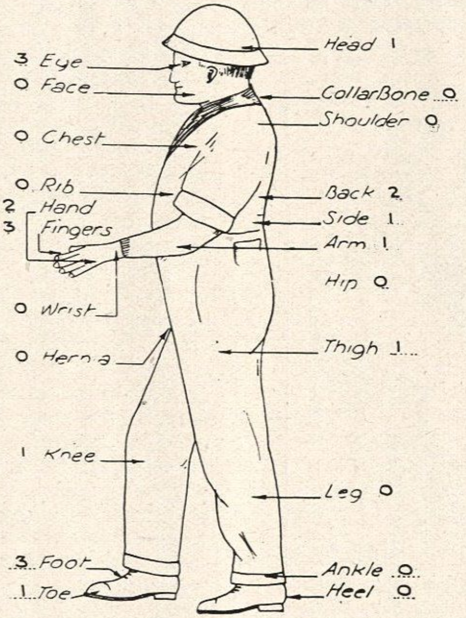
**Severity Rate**

| | Mine No. 1 | Mine No. 2 | Mine No. 3 |
|---|---|---|---|
| 1925 | 16.894 | ............ | 81.559 |
| 1926 | 17.315 | 58.088 | 1.671 |
| 1927 | 3.282 | 35.686 | .784 |
| 1928 | 54.245 | 4.268 | 2.078 |
| 1929 | 65.887 | 39.871 | 1.306 |
| 1930 | 62.706 | 4.493 | 1.259 |

**Average Number Employes**

| | | | |
|---|---|---|---|
| 1928 | 237 | 248 | 66 |
| 1929 | 248 | 273 | 66 |
| 1930 | 254 | 261 | 55 |

Frequency rate means the number of all injuries (fatal, permanent, and temporary lost-time injuries) per million man-hours of exposure. Severity rate means the number of days of disability resulting from all injuries (fatal, permanent, and temporary lost-time injuries) per thousand man-hours of exposure.



**Illustrating Injuries at Bingham Mine, U. S. S. R. & M. Company.**

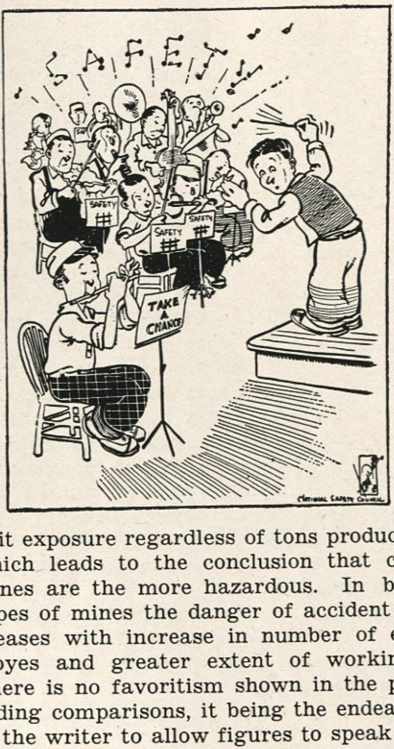
The average frequency rate for 58 metal mines reported was 63.90 and the severity rate 8.39. This again indicated the greater safety of metal mines. I firmly believe this to be the result of the naturally less hazardous physical conditions of the latter, for there is no doubt that greater and more precautionary measures are exercised in coal mining than in metal mining. A comparison of the hazard between coal and metal mines on the basis of production is more difficult to obtain. The following figures were arrived at from such data as available on Utah operations:

| Year | Metal Mines | Coal Mines |
|---|---|---|
| 1919 | 17.2 | |
| 1920 | 18.1 | 2.3 |
| 1921 | 18.2 | 2.6 |
| 1922 | 22.0 | 2.3 |
| 1923 | 24.2 | 2.3 |
| 1924 | 30.3 | 2.4 |
| 1925 | 22.5 | 1.6 |
| 1926 | 19.3 | 1.4 |
| 1927 | 15.6 | 1.1 |
| 1928 | 10.4 | 1.2 |

| | | |
|---|---|---|
| 1929 | 10.2 | 1.5 |
| 1930 | 8.0 | 1.0 |

Frequency rate per 10,000 tons production.

These figures are contradictory to Bureau of Mines' figures, the exposure period of the worker per ton of coal produced being considerably less than per ton of ore produced in Utah. With high flat seams, a Utah coal miner averages about 6.65 tons per eight hours; the metal miner approximately 1.3 tons for the same period. This is a ratio of at least 5 tons of coal to 1 ton of ore for equal periods of exposure. Even after applying this ratio to the preceding figures, frequency of accident per ton production per unit exposure is greater in metal mines. However, the only fair basis of comparison is on the unit exposure regardless of tons produced, which leads to the conclusion that coal mines are the more hazardous. In both types of mines the danger of accident increases with increase in number of employes and greater extent of workings. There is no favoritism shown in the preceding comparisons, it being the endeavor of the writer to allow figures to speak for themselves and also reduce hazards at both coal and metal mines under his supervision.



Utah coal is 40% to 50% volatile matter, low ash, low moisture and in many instances it has a high resin content. Mining of same produces a dust, one of the most highly inflammable and explosive known in the United States. Probably one-third of the mines in the State have methane. Some contain oil seepage. Arid climate deprives mines of moisture. Seams vary from 6 to 30 feet in thickness, from flat to 10-12 degrees pitch. All in all, a combination which, of a necessity, has placed the majority of Utah coal mines, if not first, well up in the ranks in conscientious endeavor to prevent accidents.

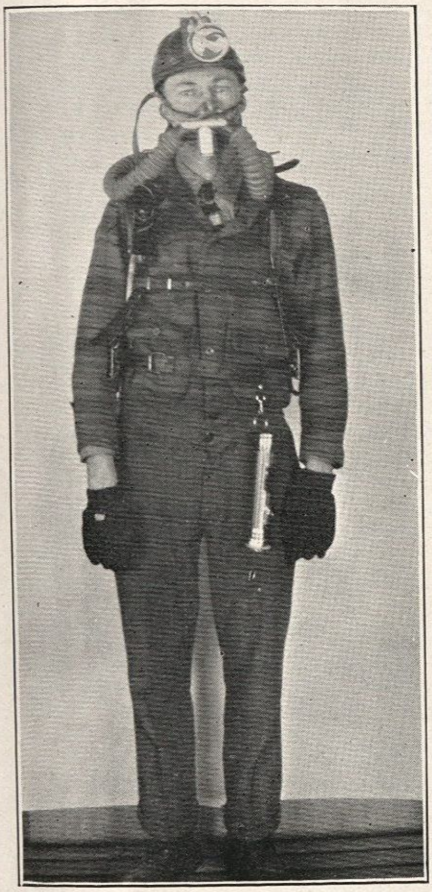
Metal mines of the state are mostly fissures in limestone or replacement of sedementaries. The latter usually stand well and offer no unusual or extraordinary hazard not encountered elsewhere. The state mining code is a good one and well-adhered to by operators. Comparatively, the metal operator's task from a safety standpoint is rather less difficult than the coal operator's.

Utah coal mines in general are equipped with hospital facilities within easy reach. Some have a resident doctor at each camp, a first-aid room at the pit mouth, and one a central hospital serving four mines.

No open lights are permitted underground, shot firing is done from the surface by independent line from surface to face. No employes are allowed in mine at time of firing and rock dusting is carried on well up to requirement. Rock dust barriers carrying as high as four tons of dust installed at frequent intervals. Some mines are now rock dusted throughout the entire workings. Mines are equipped with tight, solid-end cars. Haulage entries are graded—56-lb. steel on main haulageways. All precautions deemed essential for gaseous mines are taken whether gaseous or not, such as ventilation, rock dust, inert material on haulageways, concrete overcasts, stoppings and safety record sign boards at pit mouth. "Hard-boiled" or safety hats are compulsory. Blasting powder is furnished in red wrappers.

The larger mines maintain safety engineers who make regular inspections and reports, keep accident records, attend to helmet equipment and train rescue crews. Safety measures at some mines cost as high as 3.5 cents per ton production. The operators of these mines feel this to be one of their best investments.

Metal mines in general do not carry safety measures so far, there not being the necessity. They are equipped with hospitals and medical service, have oxygen helmets and trained crews. The use of helmets or hard hats is becoming more general and is decreasing not only severity of head injuries but the number of accidents. Use of wire screen goggles of a comfortable pattern is increasing. Blasting powder in red wrappers, due to greater color visibility, has decreased to a marked extent drilling into missed holes. Strict enforcement of the rule that all accidents, no matter how trivial, be reported and treated, decreases infection. Containers for drill steel, filled on the surface, not only get the steel to the desired point but saves many fingers and bruised heads.



Mine Rescue Apparatus, U. S. Fuel Company, Kingmine, Utah

The personal equation of the employe is common to all employers and is more or less successfully handled in many ways. To secure an honest effort against carelessness, the Joplin idea of flags of various values for periods of non-injury is used. The Arizona idea of buttons has worked well. The use of signs at working points where a large number of men pass is good, but upon familiarity with them, effect is lost. Welfare and safety associations which stir up and maintain interest do their share.

On the other hand, the employer is entitled to some consideration. The writer is a firm believer in the card system whereby the applicant is given a card to the doctor for examination. If this discloses temporary or permanent defects which would incapacitate applicant for work at hand or jeopardize safety of other workers, he should not be employed. The practice of deducting from employes, over the payroll, the accrued premiums on accident policies which they have taken out personally and voluntarily with corporate insurance companies, leads to abuses, especially where high compensation is already provided by law, and should be avoided. Life insurance is entirely different.

The welfare of a mining camp is of paramount importance in the matter of safety, although many operators fail to recognize this fact. Given a safe place to work, a decent place to live, schools for his children and some form of diversion for his leisure hours and you have a satisfied employe, who will be permanent. A large labor turn-over is directly responsible for many needless accidents through unfamiliarity with the mine and working conditions. The benefits of a permanent employe and the best class of labor are enjoyed to a greater degree by the coal operator by virtue of the fact that coal mines are longer lived than metal mines, justifying capital expenditure incidental to better camps and accommodations. There is, undoubtedly, a similarity in safety measures employed successfully in both types of mines, but if there be a common denominator it is constant vigilance, first, last and for all time to even the smallest hazard on the part of employer and employe and the teaching of the latter that danger may be seen, recognized and avoided.

## ACHIEVEMENTS

"There is many a man with a gallant air
Goes galloping to the fray.
But the valuable man is the man who's
there,
When the smoke has cleared away.

Some 'don't get nuthin' out of life'—
And when their kicks begin—
One feels inclined to say, perhaps,
They 'don't put nuthin' in'."

AX - I - DENT - AX
SAFETY FIRST
EDGAR M. LEDYARD, EDITOR

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PUBLISHED ONCE A MONTH FOR THE EMPLOYES OF THE UNITED STATES SMELTING, REFINING AND MINING COMPANY AND SUBSIDIARIES, IN THE INTEREST OF SAFETY, WELFARE AND TECHNOLOGY.

**Salt Lake City, Utah, April, 1931**

## A PHILOSOPHY FOR LIFE

On the opposite page there appears an obituary of Mr. Olaf Langeley, late Chief Engineer of the U. S. S. Lead Refinery, Inc. The obituary conveys as well as possible through words the deep respect his associates feel for him—and no finer tribute can be paid him than such expressions from those with whom he was daily associated.

Mr. Langeley rendered excellent service to the various companies by which he was employed. He cooperated fully with his fellows and with others connected with various plants throughout the organization. In addition to his professional work of a high order, his financial judgment and integrity are evidenced through his association with the bank in which he occupied an executive position.

As a young man he was adventurous as shown by the fine story he wrote for the Ax-I-Dent-Ax under the title, "Through the Maelstrom." Of his time he gave bountifully to organizations of a formal nature which led to the improvement of living conditions of the human race.

The mainspring in these fine activities lay in his interest in his fellow men and in his love of nature. Outsiders were not only impressed with his ability and willingness to cooperate, but with his interest in the common things around him. Many of the hobbies he pursued were not intimately related to his profession but he was laying the foundation for mental activities and pleasures which would endure after his retirement and during the period when his physical being would not enable him to participate in strenuous activities. The world has lost considerable through his untimely passing which prevented him from putting his accumulated knowledge into formal shape.

Mr. Langeley's career could be compared with that of many professional and business men of Europe who cultivate hobbies of inestimable value to science; many of them employ their leisure time in specialization in different fields. They look forward to the time when a satisfactory pension enables them to devote their entire time to the special field they have cultivated. Museums there reap the harvest. In particular, the British Museum represents a storehouse of material gathered in every section of the globe by loyal Englishmen.

In America such work is generally accomplished through endowments and the hiring of specialists to carry on investigation work. Many American business and professional men endure a terrific strain for a few years during which they devote their entire time to making money. Retirement probably brings too much mental relaxation but there is nothing to which they can turn. Nothing is more pathetic than an aged figure wandering aimlessly about with no occupation and no hobby.

America has many institutions filled with rich treasures and there are some connoisseurs among those who make endowments. More amateurs are needed in art, science and literature, for these are to culture what prospectors are to mining companies.

In "The Major Involution," under "A Philosophy of Age," Dr. Aldred Scott Warthin says:

"There may be individuals who wish to live to the very limit of their biologic allotment, to pass the last decade or two of their descent to the grave in uselessness, non-productive existence, dependency, in personal discomfort, and a burden to others. I personally am not of that sort.

"Happy then is the senescent who can approach his inevitable end with a normal rate of involution, still capable of intellectual pleasures, and the mature contemplation thereof, to meet a speedy release before the unhappy days of second childhood are upon him."

# Olaf Langeley, Late Chief Engineer

**U. S. S. Lead Refinery, Incorporated**

**East Chicago, Indiana**

Olaf Langeley was born in Norway, March 4, 1884, and passed away at St. Margaret's Hospital in Hammond, Indiana, March 12, 1931.

After completing his work in the public schools of Norway, he entered Pasgrund Technical College from which he received a B. A. degree in 1902.

He followed the footsteps of his forbears in Norway, shipped before the mast and visited many ports throughout the world. He lived for a time in Panama, later in New Orleans and in the fall of 1906 he joined the U. S. Metals Refining Company, now U. S. S. Lead Refinery, Inc., East Chicago, Indiana. He was active in construction work and operations until 1913 when he felt the call of the homeland and went to Norway to visit with his parents, brothers and sisters there.

Upon his return to America, he located in Louisiana where he was engaged in the construction of a large sugar mill. After completing his work there, he went to Canada and assisted in the building of a huge plant for the Dominion Iron and Steel Company. When this work was finished he returned to East Chicago and re-engaged with this company. In January, 1915, he began his work as Chief Engineer, which position he held until his death. He enjoyed an excellent reputation as an engineer and was held in high esteem by those with whom he came in contact on account of his big-hearted, kind and patient qualities.

Olaf Langeley

As former president of the Highland Chamber of Commerce and president of the Highland Planning Commission, treasurer of the Mississippi Valley Association, member of the East Chicago Chamber of Commerce and representative of the North Township Good Roads Commission, he was prominent in civic activities. At the time of his death he was vice-president of the Farmers and Merchants Bank at Highland.

His love for nature led him to spend many summers in the sand dunes along the shores of Lake Michigan. His friends spent many a happy evening with him and listened to his interesting stories of sea voyages and learned from him the habits of insects, birds and other animals as well as the names of many plants. His home in Highland on the Ridge Road was his pride and he made it a beautiful place.

Mr. Langeley was married to Rose MacFarlane of Glace Bay, Nova Scotia, in 1912. Mrs. Langeley, a sister and a brother are the only surviving relatives.

These few words are inadequate to set forth the many fine accomplishments of Mr. Langeley. Nevertheless, they carry with them a deep sense of that loss which we all feel for one who has given us a splendid example of courtesy, honor, and charity which we should try to emulate.

In the words of Dickens:

"Nature gives to every time and season some beauties of its own; and from morning to night, as from the cradle to the grave, is but a succession of changes so gentle and easy that we can scarcely mark their progress."

# The Electro-Plated Parts On Your Automobile

**By H. W. FAINT, Research Chemist**

**U. S. S. Lead Refinery, Incorporated**

Since the advent of chromium-plated parts, many unwarranted claims have been made for this brilliant metal finish on automobile parts. In addition to the chromium-plated parts, there are usually nickel and silver-plated parts. All of these have a high lustre that can be maintained for a reasonable period of time (until the trade-in for another new one) if they are given proper care.

The reflectors on the headlamps and spotlights are usually the only silver-plated parts. At the present time, the headlamp reflectors are only given a very light coating of silver. Careful study of the reflective power of various thicknesses of silver plate over nickel plate on the brass reflectors has proved that a very thin coating of silver gives the most efficient reflection of light. However, heavier deposits of silver are often found on reflectors of spotlights. In either case, remember that silver is a soft metal that a gritty polish will scratch. Use a good "silver cream polish" such as is used for silverware in the home, to keep the reflectors in proper condition. Be careful not to clog the "breathing holes" in the head lamps, so no moisture will stay in the lamps to condense on the reflectors and cause corrosion.

The nickel-plated parts are mostly the interior fittings of the closed model body type. The nickel plate covers the die-cast metal parts. Occasional polishing, with a good "grease" type nickel polish, rather than liquids, and use of "elbow-grease" with plenty of clean rags, will combine to keep the nickel-plated parts "shiny." Continued neglect of nickel plate causes it to oxidize, forming a dull grayish film coating. When this film is removed the brilliant lustre is not restored.

Then the parts must be taken to a plating shop to be "buffed" and possibly replated, especially when the nickel has been corroded so that the base metal is exposed.

The chromium-plated parts are the exterior parts, such as radiator shells, head lamps, cowl lamps, bumpers, and spotlights. The bumpers and radiator shells are made of steel with copper and nickel plate beneath the chromium plate. The lamp shells are usually made of brass with nickel plate beneath the chromium plate. Outside door handles are made of die-castings plated with nickel before chromium. The purposes of chromium plate are but two, a high lustre to the finished product and ease in keeping the surface clean. The same polish you use for nickel or the one for silver will serve to keep the chromium-plated parts looking fine. A little rubbing with a clean rag, done often enough, will usually keep the high lustre, but there are certain conditions met in driving which will cause the chromium plate to deteriorate. In cities, the winter season finds the street car companies using salt on the switches, so salt water is splashed on the car. In the country, calcium chloride spray is used to keep down the dust on gravel roads. Both salt and calcium chloride will cause the gradual corrosion of chromium. Also just a few minutes in hydrochloric (muratic) acid will be enough to dissolve all the chromium from a plated article. This emphasizes the necessity of keeping the chromium-plated parts clean to maintain the brilliant lustre of a "new car."

The question might be raised as to the use of mild polish on silver and a "stronger" polish on nickel. Ask the housewife to give you laundry soap for the next Saturday night tub. Everything has its limit and specific use, so don't expect the cure-all polish to do for everything. It may do well on one finish and be the "finish" on another.

Clean the automobile often and it is easier to keep clean.

## ALPHABETICALLY SPEAKING

Always
Be
Careful

Don't
Ever
For
Get
How
Injuries
Jeopardize
Kindred

Lax
Methods
Never
Operate
Profitably

Quit
Reckless
Speeding

Try
Using
Vigilance

Wastefulness
X-ray
Yields
Zero

# Utah Railway Company Notes

**Provo, Utah**

**THOMAS SCHOTT, Correspondent**

Mr. William W. Rush, service engineer for the Franklin Railway Supply Co., Inc., with headquarters at Denver, Colorado, made a business call at the Provo Joint Shops February 16.

Our superintendent, Mr. R. J. Vaughan, located at Martin, was a business caller at the Provo Joint Shops January 30 and February 15.

Mr. R. A. Wilsey, representative for the Bird-Archer Company of Chicago, Illinois, was a business caller at Provo Joint Shops February 16.

Mr. W. J. Kirsch, master mechanic, located at Salt Lake City, made an inspection of the Provo Joint Shops February 16.

Mr. W. I. Henry, supervisor of air brake maintenance for the Union Pacific System, located at Denver, Colorado, was a caller on business at Provo Joint Shops February 6.

Mr. D. S. Meuhart, production engineer for the Union Pacific System, Lines West of Pocatello, and located at the latter point, was a business caller at the Provo Joint Shops January 27.

Local Storekeeper T. A. Ream resumed duty January 29, after being confined to his home for several days with the flu.

Mr. J. J. Keliher, service engineer for the Paxton Mitchell Company of Omaha, Nebraska, was a business caller at the Provo Joint Shops, January 31.

Mr. L. R. Brown, assistant safety agent for the L. A. & S. L. R. R. Company, located at Los Angeles, California, was a business caller at the Provo Joint Shops February 3 and 19.

Mr. W. R. Hansen, mechanical engineer for our Company, was a business visitor at the Provo Joint Shops February 4.

Mr. J. B. Somo, our master mechanic, located at Provo, returned from the Kingmine District February 13 and again February 21, after spending several days on both occasions in that district.

Mr. U. J. West, representative and field man for the Oxweld Railroad Service, located at Los Angeles, California, was a caller on business at the Provo Joint Shops February 9 and February 13, en route from Atchee, Colorado, after making inspection of equipment on the Uintah Railway.

Mr. R. R. Smith, assistant safety agent for the L. A. & S. L. R. R. Company, with headquarters in Los Angeles, California, attended the regular monthly local shop safety meeting, which was held February 10.

On February 4 the Provo Joint Shop Athletic Club gave an entertainment in the local armory which was well attended by shop employes and a large group of American Legion members and their families. Zira Draper, president of the Athletic Club, was in charge of the following splendid program:

Selections by the local shop band under the direction of Professor Robert Sauer.

Brief address by joint foreman E. J. Hall.

Costume specialty dance by little Miss Gloria Gronneman.

"The Air Mail Pilot's Love Song," latest composition by Professor Robert Sauer, sung by the Imperial male quartette, with Mrs. Joseph Ahlander accompanist.

Two costume dances, little Misses Clarice Winget and Thelma Carter.

An especially interesting feature of the program was the showing of motion pictures of actual war scenes taken during the World War by photographers in the employ of the Government. The concluding number on the program was a selection by the band. It was announced that the Union Pacific System's annual athletic meet for 1931 would be temporarily held in abeyance.

Frank Bridge, switch engineer in the employ of the L. A. & S. L. R. R. Company at Provo, died suddenly from apoplexy at 11:40 p. m. February 18. Mr. Bridge had served that company for 27 years. We extend our heart-felt sympathy to the bereaved.

Mr. C. A. Rolling, service engineer for the Garlock Packing Company, with headquarters in Salt Lake City, was a business caller at the Provo Joint Shops February 4.

W. M. Shepherd, clerk and stenographer, began a two weeks' vacation February 18.

Mr. D. B. Ryan, sales manager for the Griffin Wheel Company, located in Salt Lake City, accompanied by local storekeeper, T. A. Ream, departed the 18th for the Kingmine district on a tour of inspection.

Mr. W. G. Dahl, traveling accountant for our company, with headquarters in Salt Lake City, accompanied by M. W. J. Macklin, traveling accountant for the L. A. & S. L. R. R. Company, located in Los Angeles, California, were business callers at the Provo Joint Shops February 9.

Mr. R. J. Knapp, mechanical expert for the Westinghouse Air Brake Company located at Salt Lake City, was a business caller at the Provo Joint Shops February 18.

Donald Hansen, 15, son of Mr. and Mrs. W. C. Hansen, 407 South Third West, Provo, died February 5 at a local hospital following a week's mastoid illness. Deceased was a promising violinist and an active high school student, a member of the Glee Club and the B. Y. U. Symphony Orchestra. The father is a well-known railroad man and the local agent for the Salt Lake & Utah R. R. Co.; he was employed as car clerk for many years in the agent's office in the Provo Joint Yard. Funeral services were held Sunday in the Sixth Ward chapel. Interment was made in the Salt Lake City cemetery. We mourn with our friend in his irreparable loss.

Mr. Ben F. Rugg, locomotive engineer for the D. & R. G. W. R. R. Co. was killed in North Salt Lake February 3 when a truck load of blasting caps collided with train No. 3 on a crossing causing an explosion. The deceased had been in the service of the above company for 46 years and was eligible to retire on a pension in April. At the time of the accident he was at his post of duty, driving the locomotive pulling this train. W. E. James, the locomotive fireman with Mr. Rugg, escaped with injuries. Both of these men were well known by many of our employes. Funeral services were held for Mr. Rugg February 8 and interment was made in the Ogden City cemetery. We extend our sympathy to the survivors.

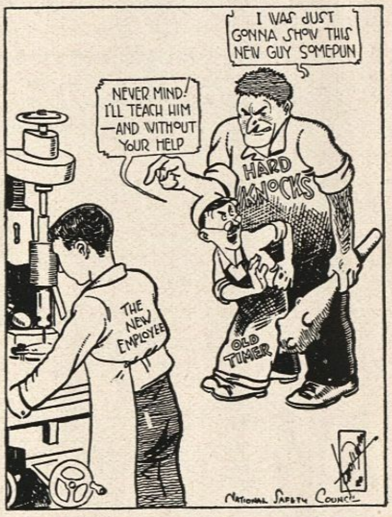
Mr. W. F. Cotterell, car foreman, Provo Joint Yard, accompanied by his wife, was called suddenly, January 30, to Mound City, Missouri, on account of the death of his sister, Mrs. Robert Russell. On January 21 they were advised of the death of his brother-in-law, Albert Smith at Holton, Kansas. The deceased was 86 years old and a veteran of the Civil War. We extend our genuine sympathy to the bereaved.

Mr. Brown Bush, inspector for the Interstate Commerce Commission, was a business visitor at Provo Joint Yard March 18.

Mr. F. S. Moody, lubricating engineer for the Texas Company, residing at Kansas City, Mo., was a business visitor at Provo Joint Shops February 27.

Mr. R. R. Smith, assistant safety agent for the L. A. & S. L. R. R. Co., Los Angeles, California attended the regular monthly Provo Joint Shop safety-first meeting March 10.

Mr. G. S. Anderson, our Vice-President and General Manager, accompanied by Superintendent R. J. Vaughan, Mr. J. B. Somo, master mechanic, and Robert Crosbie, traveling engineer and trainmaster, made an inspection of the Provo Joint Shops and yards on the 17th, at the conclusion of which the party motored to the Kingmine District where the inspection was resumed and concluded on the 20th.


I WAS JUST GONNA SHOW THIS NEW GUY SOMEPUN
NEVER MIND! I'LL TEACH HIM —AND WITHOUT YOUR HELP
HARD KNOCKS
THE NEW EMPLOYEE
OLD TIMER
NATIONAL SAFETY COUNCIL

The Provo Joint Shop Council held its regular meeting on March 19 at which suggestions for the mutual benefit and welfare of the operating companies and the employes were offered and discussed by the committee.

The regular monthly divisional safety-first meeting for the Salt Lake Division was held at Provo Joint Shops February 25, which was well attended by many committee members from other towns and cities, including Mr. W. R. Spettigue, chief safety agent for the L. A. & S. L. R. R. Co., Los Angeles; Mr. W. H. Smith, superintendent, and Mr. J. T. Wardenburg, trainmaster, Salt Lake City. Presentation was made of the banner for the best record in accident prevention on the Union Pacific System, which was achieved by the local shops for the year 1930.

Mr. E. J. Cole, assistant to general superintendent M. P. & M., Union Pacific System, Omaha, Neb., accompanied by Mr. W. J. Kirsch, master mechanic, Salt Lake City, made an inspection of the Provo Joint Shops and Yards on March 10.

Mr. A. A. Hendricks, President, Union Pacific System Athletic League, Omaha, accompanied by Earl Smoot, formerly employed as machinist in the local shops and at present manager of the Callahan Hardware Co., this city, were business visitors at the Provo Joint Shops, March 19. An interesting and well-attended program was given at 8:00 P. M. that date in the Auditorium of the Provo Central High School at which moving pictures of the System Athletic Meets held during previous years at Provo, Ogden and Boise were shown. Selections were rendered by the local shops employes' band.

Mr. A. G. Hedges, watchman for the Salt Lake Division of the L. A. & S. L. R. R. Co., Salt Lake City, was a business visitor at Provo Joint Shops February 21.

Mr. W. J. Kirsch, master mechanic for the L. A. & S. L. R. R. Co., Salt Lake City, was a business visitor at the Provo Joint Shops February 27.

Mr. J. F. Long, superintendent M. P. & M. for the L. A. & S. L. R. R. Co., Los Angeles, Calif., accompanied by Mr. W. J. Kirsch, master mechanic, made an inspection of Provo Joint Shops and yards on March 3.

Mr. Harry T. Coffey, electrical engineer for the L. A. & S. L. R. R. Co., Los Angeles, Calif., was a business visitor at the Provo Joint Shops March 3.

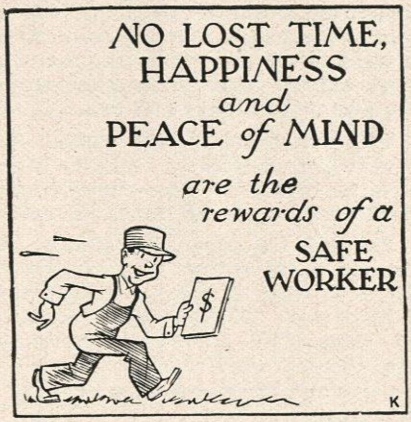
Mr. J. T. Wardenburg, trainmaster for the L. A. & S. L. R. R. Co., Salt Lake City, was a business visitor at the Provo Joint Shops March 17.

Effective March 15 the Salt Lake Division of the L. A. & S. L. R. R. Co. was extended to Daggett, Calif., and the territory of Superintendent A. L. Coey, of the O. S. L. R. R. Co., Pocatello, Idaho, was extended to include the Salt Lake Division of the L. A. & S. L. R. R. Co. Effective same date Mr. W. H. Smith, superintendent of the L. A. & S. L. R. R. Co., Salt Lake Division, was transferred to the Los Angeles Division, with headquarters at Los Angeles, Calif.

Mr. R. J. Vaughan, superintendent for our Company, located at Martin, was a business visitor at Provo Joint Shops March 6, 11 and 16.

Mr. W. A. White, road foreman of engines for the L. A. & S. L. R. R. Co., Salt Lake City, was a business visitor at Provo Joint Shops March 16.

Mr. F. E. Cragin, district storekeeper, for the L. A. & S. L. R. R. Co., Los Angeles, Calif., made an inspection of the local store on March 6.



Mr. M. J. McGurl, road foreman of equipment, and Mr. J. R. Loftis, trainmaster for the D. & R. G. W. R. R. Co., Salt Lake City, and Helper, Utah, respectively, were business visitors at Provo Joint Shops March 6.

Mr. H. B. Mensel, joint agent for the L. A. & S. L. R. R. Co. and our Company, located at Provo, accompanied by his wife, motored to Price March 12, where they attended the funeral of Mrs. Eugene Santchi. Mrs. Santchi was the wife of retired Tipple Foreman Santchi at Hiawatha.

Messrs. F. A. Rosenfelt and D. S. Neuhart, production engineers for the Union Pacific System of Omaha, Neb., and Pocatello, Idaho, respectively, were business visitors at the Provo Joint Shops February 27 to March 2, inclusive.

# Engineering Department

## ACETYLENE WELDING GENERATOR

**Designed and built by W. J. Dearing, Boiler Shop Foreman, Midvale Plant**

The accompanying design illustrates a 100-pound carbide capacity acetylene generator in use at the Midvale Plant of the U. S. S. R. & M. Co. since 1926.

It is what is known as a direct automatic pressure-feed generator. The general construction of the tank and carbide hopper is similar to many on the market, but in the automatic carbide-feeding mechanism Mr. Dearing has developed a design which is not only original, but is, we believe, an improvement over any that we have seen.

The tank is built to hold 100 gallons of water. In the top of the tank is located the carbide hopper, capacity 100 pounds, the bottom of which is about 18 inches above the water.

Acetylene gas is generated by the carbide dropping into the water. This gas is then conveyed from the tank through a ½-inch pipe and check valve to the flash-back tank attached to the side of the main tank.

The flash-back tank contains one foot of water in the bottom; above that an air space of 4½ inches, then a space of 5½ inches filled with loosely packed hair or felt. The gas is sent through this tank by a ½-inch pipe reaching from the top of the tank through the water to about ½-inch from the bottom. The gas passing through the water is purified and at the same time the danger is eliminated of a flash-back from the welding torch reaching the main tank. The gas, after passing through the water is wet, but the moisture is absorbed by the hair filter and the gas is delivered to the blow pipe or torch dry and pure.

The automatic carbide feeding system is composed of a rubber diaphragm and coil spring, connected to a rod leading to a lever mechanism with cone valve attached. The latter opens and closes the feed opening in the bottom of the carbide hopper. The adjusting screw (6) on top of the spring is used to regulate the pressure of the gas.

To start the generation of gas, push down hand lever (1), which opens the cone valve (2) in the bottom of the hopper. Carbide then drops into the water. When the desired pressure of gas has been generated it travels upward through channel (3) to the diaphragm (4), pushing it upward and compressing spring (5), thus closing the cone valve (2). As the gas pressure diminishes, the spring forces the diaphragm down, thereby opening the cone valve. Thus, by the expansion of the spring opening the valve and the gas pressure closing it, the regulation of carbide feeding is obtained automatically.

This feeding mechanism can be used on either a 25, 50 or 100-pound capacity generator by merely altering two parts, the valve lever and the rod connecting it to the diaphragm.

The working pressure of the acetylene gas should never exceed 15 pounds per square inch.

This machine can be built in the smelter shops at considerably less cost than one of the same size can be purchased on the market.

—F.M.W.

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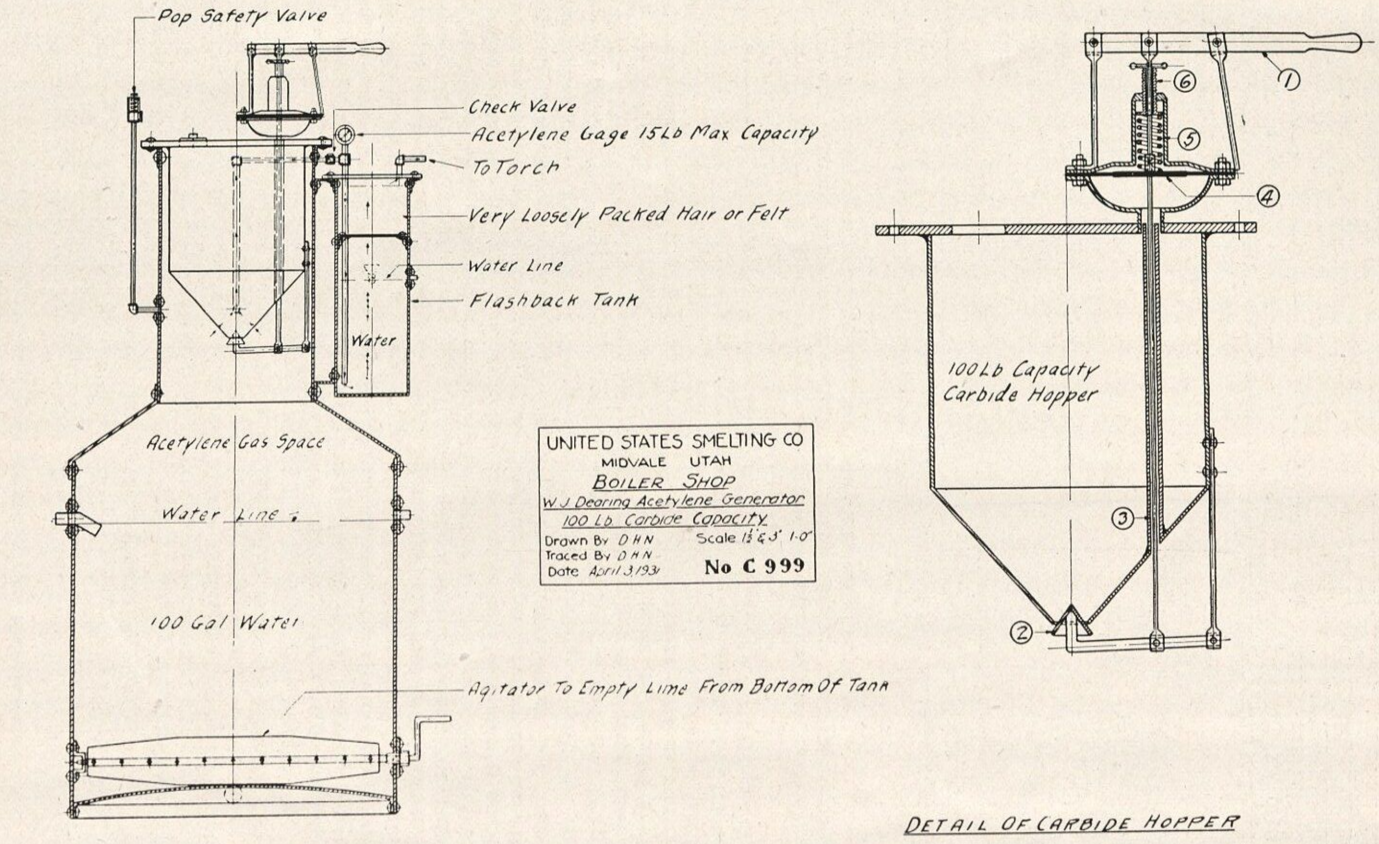
### SPECIAL NOTICE TO ENGINEERS AND DRAFTSMEN

If equipment and building materials were always properly designed, emphasizing small units, the following would never have occurred:

Roy Simpson, Negro laborer, was putting in his first day with a railroad section gang under a foreman who was known for getting the maximum amount of labor out of his men. Came quitting time. Before he went, he approached the boss and said: "Mister, sure you got me down on the payroll?" The foreman looked over the list of names. "Yes," he said, "here you are—Simpson, Roy Simpson. That's right, isn't it?" "Yaas, suh, boss," said the Negro, "dass right. I thought mebbe you had me down as Sampson."



UNITED STATES SMELTING CO
MIDVALE UTAH
BOILER SHOP
W. J Dearing Acetylene Generator
100 Lb. Carbide Capacity
Drawn By D H N
Traced By D H N
Date April 3, 1931
Scale 1½" & 3" 1-0"
**No C 999**

100 LB CARBIDE CAPACITY ACETYLENE GENERATOR

DETAIL OF CARBIDE HOPPER

AUTOMATIC CARBIDE FEEDING SYSTEM

# Building and Engineering Injuries

**By WILL J. FRENCH, Director**

**California Department of Industrial Relations**

In addressing the Twelfth Annual Convention of the Associated General Contractors of America, Palace Hotel, San Francisco, Monday, January 26, 1931, Mr. French said, in part:

"The problems of human relations and cost make 'Construction Safety' a topic of vital interest to all engaged in the building industry. It is a matter of congratulation to note that the Associated General Contractors of America, Inc., realizes the opportunities for constructive service and has earnestly and intelligently determined to make the most of them.

"This is an era of organization. Man cannot get the best results witnout joining with his fellows. The days of keen competition and of high pressure make it all the more necessary that the individual be submerged in action that spells benefit for the community. Especially is this the case when there is under consideration means for saving men from untimely death or injury.

"My conception of the best way to treat a subject like 'Construction Safety' is to avoid the technical presentation in favor of the general principles. We read in high authority that while the letter is good, it is the spirit that giveth life.

"Deaths and injuries in the great industry you are connected with rank high in the statistics kept by the Industrial Accident Commissions of the States. This is partly due to the extensive nature of building and engineering construction, and also to the inherently hazardous work. Those who are employed in high places are likely to fall. A misstep may prove fatal. Care, safety education, proper supervision, and cooperation on all sides and from every source, are factors in attaining the great objective.

### Safety Has Both Human and Mechanical Aspects

"State safety laws, the orders and rules of Industrial Accident Commissions, and the knowledge that immediately tells what should be done, combine to give each contractor a starting point. The planked floors, the protected scaffolds, the safety nets, the special elevators for material, and all the numerous equipment that often means the difference between life and death, are sure of their places in the program of the employer who needs the letter, but who is dominated by the spirit of accident prevention.

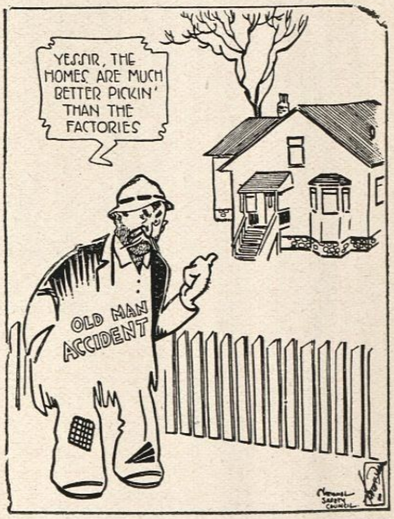
"Next comes watchfulness for chances to go far beyond the law of the order. In other words, the minimum should be considered the printed requirement, and the maximum each opportunity that presents itself as the work progresses.

"The foreman is often described as 'the key man to safety.' He is, if the employer so insists. But if the employer discourages safety recommendations, if he drops hints that the cost is prohibitive, and if he dampens all the laudable activities of either superintendent or foreman, then the key passes to such an employer and it soon becomes rusty and the safety door is permanently closed.

"Good working conditions, pure drinking water, and a satisfied group of employes, are factors of importance. In your line of business adequate ventilation is usually furnished without cost. And yet it is surprising what excellent dividends will follow excursions into the realms of protection that go far beyond the mechanical devices.

"Safety is no longer merely mechanical in its operations. It must include all the human relations."

* * *


YESSIR, THE HOMES ARE MUCH BETTER PICKIN' THAN THE FACTORIES
OLD MAN ACCIDENT
National Safety Council

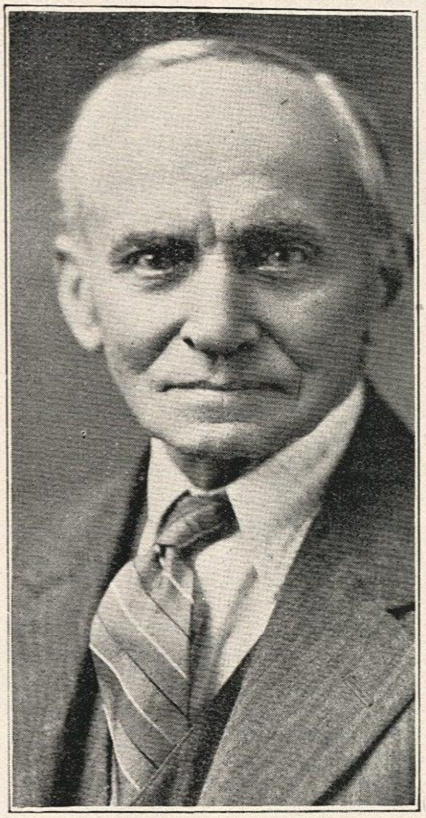
# A Mechanical Heritage

1854 is a notable date in history. In that year the Astor Library was opened; William Walker "divided" Sonora and Lower California; the first commercial treaty between Japan and the United States was negotiated; the Kansas-Nebraska bill was passed; negotiations for the annexation of the Sandwich Islands were begun, and Harry Stagg was born in Burbidge, Wiltshire, England.

At the age of five, Mr. Stagg began his education in a primary school from which he was transferred to a private school where he remained for one year. Then followed three years of education for the youthful Stagg in a boarding school.

Mr. Stagg's boyish ambition was to be a sea captain but his first steady occupation was on a farm in 1863. It was not so easy to get a job on a farm in those days as at present. He was compelled to sign for a year before he was allowed to work. His farm experience covered some eight years.

In 1871 he began his career as a mechanic in Wales as an underhand puddler in a rolling mill. In 1872 he became an engine wiper; 12-hour shifts and lots of discipline. In 1874 he engaged as a mechanic and assistant to the hoisting engineer in the coal mines of South Wales.



Harry Stagg

On March 12, 1876, he passed the examination as fitter, second class, and joined the British navy. His first assignment was to H. M. S. Warrior, a 32-gun frigate stationed near Portland, Dorsetshire. The Warrior was a naval reserve training ship, equipped with steam and sails. Three months cruising and he was promoted to engineer of the steam launch. Then followed several years of seafaring life on the Devastation, the Himalaya and other vessels, during which time Malta, Gibraltar and many other ports were visited. In the succeeding years cruises were made through the Red Sea with details at Aden, British headquarters for this section of the world in the seventies. Aden is one of the hottest places on earth and probably the driest. Rain does not fall for months or years at times.

Mr. Stagg's trip home through the Suez Canal in 1880 was his last active seafaring experience. After his marriage to Annie E. Spanswick in 1881, he engaged as a mechanic at an iron plant where he remained for four years.

In 1885 Mr. and Mrs. Stagg emigrated to the United States. His first job in America as a mechanic was with the old Provo Foundry the same year. In June, 1903, he entered the employ of the United States Smelting Refining and Mining Company as a mechanic at Midvale. He served the company as an active machinist for years and in 1926 was given a position as gatekeeper at the main entrance to the works, where he may be found any day.

Three different monarchs have ruled England since Mr. Stagg began his career as a mechanic. Eighteen chief executives have served the United States during the same period—Pierce to Hoover. Practically all of the region west of the Mississippi river has been explored, developed and settled. Great changes have been brought about in social life, wages, hours of labor, safety and industrial conditions. Will the following seventy years record as many changes as Mr. Stagg has witnessed?

Mr. Stagg's father was a carpenter by avocation; Mr. Stagg has made practical mechanics his vocation.

# These Days Banish Smiles and Wear Men's Soles

### Consistent Borrower

"Mr. Drum, when you all gonta pay me that ten dollahs you owes me?"

"Next week!"

"Yeah, but that's what you tol' me last week."

"Uh-huh, and that's what I'm going to tell you next week, cause I'm not a man that says one thing one week and sumthin' else the next."

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### An Admirer of Scott

The professor had just finished an evening talking on Sir Walter Scott and his works when a lady said: "Oh, professor, I have so enjoyed your talk. Scott is a great favorite of mine."

"Indeed," said the professor, "what one of his books do you like best."

"Oh," answered the lady, "I haven't read any of his books, but I am so fond of his Emulsion—I've used a lot of that."

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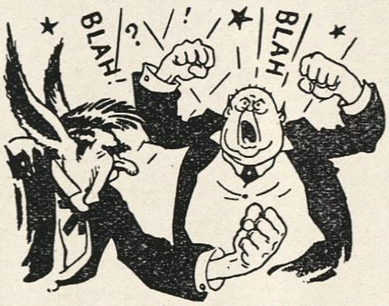

Silver Debate—1896

The honeymoon is over, in the opinion of a friend, when he stops calling her darling and calls her "say."

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One hears a great deal about the absent-minded professors, but it would be hard to find one more absent minded than the dentist who said soothingly as he applied the pliers to his automobile, under which he lay. "Now, this is going to hurt just a little."

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### Sensible to the Last

"Mandy, ah have one mo' wish afore ah die."

"What is that, Charley."

"Ah wants you to marry Deacon Smith."

"Why so, Charley?"

"Well, the deacon trimmed me on a houn' dog once."

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### "Still" Am Is Right

Rastus (stumbling upstairs at 3 a. m.): "De old gray mare she ain't what she used to be."

Mandy (coldly): "But de old white mule still am."

### Speedy

The traffic officer raised his hand, and the lady motorist stopped with a jerk. Said the officer, as he drew out his little book, "As soon as I saw you come around the bend I said to myself 'forty-five at least.'"

"Officer," remonstrated the lady indignantly, "you are very much mistaken. It's this hat that makes me look so old."

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### Whew!

"Don't you think," airily suggested the new partner, "that you ought to brush up a bit on your correspondence? Use big words; they lend dignity to your letters."

"Perhaps you're right," admitted the other, calmly studying the end of his cigar, "but, while eschewing mediocrity of expression through platitudinous phraseology, it behooves one to beware of ponderosity, and to be mindful that pedantry, being indicatory of an inherent megalomania, frustrates its own aim and results merely in obnuilation."

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We can understand why a fool and his money are soon parted, but where he gets it is what gets us.

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### Needs Father's Hand

Little Willie: "Mom, you said the baby had your eyes and daddy's nose, didn't you?"

Mom: "Yes, darling."

Willie: "Well, you'd better keep yer eye on 'im. He's got grandpop's teeth now."

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### Making It Pay

Efficiency Expert: "You are wasting too much time on your personal appearance."

Typist: "It's not wasted. I've only been here six months and already I'm engaged to the junior partner."

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### Just One Fireside Hero

Proud parent (who served in the A. E. F.): "And that which I have just told you, son, is the story of my experience in the World War."

His son: "But, papa, what did they need the rest of the army for?"

# Walking Five Miles to Make Nine Holes

### Greatly Indebted

One man: "I owe a great deal to that woman on the corner."

Second: "Sort of a guiding light, eh?"

First: "No, she is my landlady."

### No Scotch Joke

The Scot, goat of many anecdotes, occasionally turns the tables.

In an English political meeting one of the candidates patriotically orated: "I have been born an Englishman, I have lived an Englishman, I hope I shall die an Englishman."

From the back of the hall, in an unmistakable accent, came the question: "Mon, hae ye no ambeetion?"

The plumber worked and the helper stood looking helplessly on. He was learning the business. This was his first day.

"Say!" he inquired, "do you charge for my time?"

"Certainly, you idiot."

"But I haven't done anything."

The plumber, to fill in the hour, had been looking at the finished job with a lighted candle. Handing the two inches of it that was still unburned to the helper, he said witheringly:

"Here. If you gotta be so darned conscientious, blow that out."

Safe and Satisfied in the '90s

### Fine Point of Testimony

During the trial of a celebrated will case an Irishman was the principal witness.

"Was the deceased," asked the lawyer, "in the habit of talking to himself when he was alone?"

"I don't know," was the reply.

"Come, come, you don't know, and yet you were intimately acquainted with him?"

"Yes," said the witness slowly, "that's so, but you see, I never happened to be with him when he was alone."

"I have a cold or something in my head."

"A cold undoubtedly."

### Health's a Great Thing

Two Irishmen, who had not seen each other for a long time, met at a fair.

O'Brien: "Sure, it's married I am, and I have got a fine, healthy boy, which the neighbors say is the very picture of me."

Malone: "Och, well, what's the harm so long as the child is healthy?"

### And He Wasn't Invited

An Irishman lay dying when the odor of cooking assailed his nostrils. Summoning his weeping daughter to his bedside, he said:

"Nora, darlint, ain't it doughnuts that I smell?"

"Right for ye, father," the girl replied.

"And would ye be asking your mither if I can have one before I die?"

The daughter delivered the message to mother in the kitchen and brought back this answer:

"Mither says ye cannot have one of them doughnuts; they're for the wake."

### Helpfulness

Two crack golfers sliced their drives into the rough and went in search of the balls. They searched for a long time without success, a kindly old lady watching them with sympathetic interest.

Finally, after the search had lasted half an hour, the dear old lady spoke to them.

"I don't want to bother you, gentlemen," she said, "but would it be cheating if I told you where they are?"

First came the "realtor," then the "mortician," later the "beautician," subsequently the "bootician," then the "pedicure." And the other day a large motor truck careened down Broadway, bearing the imposing legend: "Kelly & McGuire, truckologists."

### Hand Work

Judge: "What weapon did you use to inflict these injuries?"

Pat (proudly): "None, your Honor. It was all hand work."

# Midvale Mill and Smelter News

**F. M. WICHMAN, Correspondent**

Supt. Lemke was on the sick list for a few days recently with an attack of the "flu." Knowing his propensity for hard work and being on the job, we will wager that Mrs. Lemke and the doctor had a hard time to keep him at home and in bed.

W. J. Dearing and Mrs. Dearing motored to Richfield over the week-end to visit a daughter who was ill in the hospital.

E. E. Mortensen of the boiler shop and his family visited relatives in Spring City during the recent shut-down.

Arthur Erickson, former plant engineer, was a recent visitor at the smelter.

Jake Isler, foreman of the carpenters, writes the correspondent as follows:

"There hasn't been anything said regarding this faithful bunch of old-time carpenters. Some would think we were not existing, because we are too bashful to boost ourselves. Nevertheless, we have kept the ball a-rolling all this cold winter through."

Jake then describes the large amount of repair work done to the trestles; the installation of rubber weather-strips on the baghouse doors; the relining of the receiving bins, etc. We will not deny the fact that his band of "wood butchers" has been busy, but as for not saying anything about them—Gosh All Hemlock! the correspondent tries hard enough to get news out of the bunch every month.

The Brunton Furnace department has been given a much needed overhauling during the winter. Two of the furnaces have been practically rebuilt. A new type of combustion chamber, using coke breeze instead of pulverized coal, has been installed and is operating with complete satisfaction to "Arsenic Supt." Burke. He says it is producing much cleaner arsenic at considerably less cost for fuel. The plant is much cleaner in consequence and the danger of fire and explosions from coal dust is eliminated.

Carl Burg, former assistant master mechanic, who left here in 1928 to accept the position of master mechanic at the property in South Africa at which "Doug" Jessup is assistant manager, has written "Bill" Dearing an interesting letter. It was written about Christmas time and he says, "We have had 12 inches of rain in less than three weeks—the grass is up 6 inches—we have all kinds of flowers—had our first mess of corn on the cob the other day and strawberries—the wife has a fine garden and spends most of her time in it with her black boys—she is also raising chickens." Carl says that he is looking forward to his return to good old U. S. A. this year. It is not likely that "Doug" will return as soon, owing to the illness of Manager Stevens.

Greater cooperation between the smelter and the mines in Bingham and Lark has been inaugurated this winter with benefit to all concerned, especially the company as a whole. The smelter shops have aided the mines considerably and by cooperative use of the smelter trucks much time and money have been saved.

Another "Wild Animals in Midvale" story comes from the Assay Office. Bird and Wahlquist went rabbit hunting. On their way home they encountered one of those small black animals with a white stripe on its back and an upright (if not uprighteous) tail. Having read in a book that if you hold a skunk by the tail you are perfectly safe, they decided to try the experiment. The tail above referred to was protruding conveniently above some brush, so Wahlquist seized it. Fine! the book was right. Nothing happened. But—and here's where the rub came in—either the boys had forgotten what the book said further on or else the book had failed to tell them what would happen when they let go the tail. Anyway, it happened and now the boys have promised their mamas to try no more stunts with skunks.

"Homerun" Schuster, chief clerk at the smelter, has just received from the boys in the city office a challenge to play the smelter employes a game of baseball on May 16th. Mr. Schuster answers their "R-S-V-P" by saying, "Allons!"

## ROADS THAT LAST

Hordes of autos now remind us
We should build our roads to stay,
And departing leave behind us
Kinds that won't be washed away.

When our children pay the mortgage,
Father made to haul the load,
They'll not have to ask the question—
"Where's the bond," but "where's the road?"

# Accidents Classed as Unusual

**By A. H. AGATON, Boiler Inspector, Industrial Accident Commission**
**Department of Industrial Relations, State of California**

How often we see or note some action taken, which is accepted as a matter of course, but after such action results in injury or death, we realize how hazardous it really was. This was forcibly brought to the writer's attention while investigating a recent fatality.

It was the practice to shunt three or four freight cars into the yard. The first car would be "spotted" opposite the loading platform and loaded or unloaded as required. The next car would then be moved and the same operation repeated. This was accomplished by holding a 4 by 6 by 38-inch timber against the freight car and backing an auto truck against the timber, thus shoving the car to the required position. The same thing has been done time and time again, with no bad results, but this time the timber slipped or failed, crushing the man holding it between the freight car and truck.

Perhaps the idea was adopted from railroad practice, but in the latter case the locomotive is on one track and the freight car on an adjacent parallel track. A specially made push pole is used as the connecting link. The ends of this pole fit into the socket plates, which are provided near each corner of every car. It is obvious that if the locomotive is on the same track as the car to be moved, a direct coupling is made.

When it is necessary to move a car a short distance, no make-shift arrangement should be used. Crowbars come under this category, but car-moving bars are approved. The latter have a foot that rests on the track, which practically eliminates the slipping hazard. Revolving drums or spools, securely anchored, are also approved and when used should have a substantial wire cable to do the hauling. Some auto trucks are fitted with such drums, and they would answer the purpose nicely. We see no objection to the use of a steel bar securely fastened to an auto truck. This bar should be held in a rigid horizontal position, that is, if the truck is to shove instead of haul.

We realize that men are inclined to use the first thing that comes to hand, particularly when in a hurry. If all of us would only try to visualize every single angle of a job, before tackling it, there would be fewer accidents.

Although much has been written about the accidents due to the use of gasoline in the homes, in nearly every case the impression is left that such accidents are unusual. This, however, is not the case. It was only recently that a woman was burned to death in her home in Oakland when cleaning curtains with a cleaning fluid. It may be that she was using a cleaning fluid or that she was using ordinary gasoline. If she had been using a nonexplosive cleaning fluid, the accident could not have occurred. Gasoline should never be used for cleaning purposes.

Another type of home accident classed often as an unusual accident, is that in which children are burned due to playing with matches. There was such an accident in Alameda recently. Matches should never be left where they can be reached by children.

Still more recently the newspapers carried an account of a woman who fell from a chair while hanging curtains and was killed because a hairpin punctured her skull. This type of accident, in so far as the hairpin is concerned, is unusual, but it is not at all uncommon for people to fall from chairs, especially from rocking chairs, which are being used as ladders while hanging curtains or pictures.

These so-called unusual accidents will continue until people learn to do things in a safe manner. You may think that such an accident would not occur to you; undoubtedly the people who have been hurt or killed in these unusual accidents thought the accidents, if they thought about it at all, would not occur to them.

## A PINT OF INK; A MONKEY WRENCH

A railroad has to haul one ton of freight forty-eight miles to get the money with which to buy one pint of ink, according to an executive in the research department of the National Transportation Institute. To buy a crosstie, that expert tells us a ton of freight must be hauled seventy-five miles; a hand lantern, 105 miles; a freight car wheel, 1,287 miles; a monkey wrench, 115 miles; a day's work of a machinist, 534 miles—and so on.

# The Devious Paths

**In 1874 Dan De Quille wrote his "Big Bonanza," standard authority on the mines of Virginia City, Nevada. The introduction was written by Mark Twain and the book was dedicated to John W. Mackay, dominating spirit of the "Big Four."**

**Compare the opening sentence in Mr. De Quille's "A Chapter of Accidents" with that of Mr. Muir's in his "Safety" article, this issue. It is interesting to note that drilling loaded holes and picking the contents out of fulminating caps were common errors in the seventies and also today, after all these years of preaching and warning. We have had lots of "Safety First," but will also have to have "Safety Last" until someone finds a way to protect people against themselves.**

**From "A Chapter of Accidents"—"The Big Bonanza":**

"Accidents of every imaginable kind have occurred since the opening of the first mine on the Comstock, still occur, and will continue to occur so long as a mine on the lode is worked.

"In the early days, when the miners worked in a primitive way with a hand-windlass, and sunk a small round shaft resembling an ordinary well, they quite as frequently broke legs, arms, and ribs, or were instantly killed, as at the present day. Though men were working in that which was but a straight round hole, only fifty or a hundred feet in depth, they were still able to injure themselves in many ways. They fell out of buckets, or the crank of a windlass was broken, and they went back to the bottom of the shaft "by the run;" a blast exploded while they were yet standing over it; rocks fell out of the walls of their untimbered shafts; or dropped from a bucket as it was being landed at the top of the shaft—in short, they were maimed and killed in ways innumerable and past finding out until the thing had happened.

"At the present day, with all manner of safety apparatus, and every avenue to accident seemingly thoroughly guarded, men are wounded and killed the same as before. They are constantly being hurt and killed in new and unheard of ways—in fact, in every way imaginable. It is a saying in the mines, that these accidents run in streaks; that they occur in groups. When two or three accidents have happened within as many days, you will hear the miners say: 'Now, look out, we are going to have a regular run of accidents!' and so it generally turns out. There will often be a dozen accidents within a fortnight, half of them, perhaps, of a fatal character.

"More accidents happen to old miners than to men who are new to the business. The old miner sometimes forgets where he is, while 'where he is' is just what the greenhorn is all the time thinking about. He is always on the lookout for trouble and he is always holding on to something that has the appearance of being pretty substantial—particularly when he is in the neighborhood of shafts and winzes; but a man who has worked in the mines for years will walk into a winze or chute in a musing mood, or run a car into the main shaft and be pulled in after it, which is a thing a green hand has never been known to do. Shafts, chutes, winzes, and things of that nature are what he is always looking for, and you couldn't pull him into one of them with any yoke of oxen ever seen in a mine.

"In February, 1874, they had a new blasting experience at the Belcher mine, Gold Hill. They had this experience at the 1200-foot level at a point where a patent drill run by compressed air was being used. It was the practice to drill a number of holes, charge them all with giant-powder cartridges (without any tamping), and explode the whole series at once by means of an electrical battery. On the occasion of the accident, the men on the forenoon shift had fired a number of holes in this way, but one of the holes, it seems, did not explode, the wire thrust into it having slipped out. When the afternoon shift came to work, they supposed this hole was one that had not been finished, and, inserting the drill, began working in it. The concussion of the drill fired the cartridge, and a terrific explosion followed.

"At the moment of the explosion there were five men standing about the drill, all of whom were more or less injured.

"The caps used in exploding giant-powder and nitro-glycerine are filled with a powerful fulminating powder, and are very dangerous. They explode with the slightest scratch upon their contents. They are about half an inch in length, and their interior diameter is sufficient to admit the end of a piece of ordinary blasting fuse. Persons unacquainted with their uses always appear to be overcome by an ungovernable

# Where Wanton Fancy Leads—Rowe

curiosity in regard to the nature of their contents, the moment they by any means get hold of any of these caps. The first thing they do is to begin probing and scratching in the interior of the little copper cylinders, in order to get out and examine a sample of their contents. It invariably happens that at about the first or second scratch the cap explodes, and the person engaged in prospecting it loses the ends of two fingers and the thumb of the left hand.

"In Virginia City and Gold Hill, about one boy per week, on an average, tries this experiment, and always with the same result. In the two towns there must now be scores of boys who lack the ends of the thumb and first and middle fingers of their left hands. On one occasion a boy created quite a sensation in one of the public schools by prospecting the interior of one of these giant-powder caps. The report startled the whole school, frightened the school-teacher nearly out of her wits, and spattered blood and bits of flesh and bone over the faces and books of half a dozen of the pupils. Miners very frequently carry these caps loose in their pockets, often mixed with their tobacco, and thus occasionally get them into their pipes. Several favorite meerschaums have been lost in this way, and the ends of a few noses."

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# The Gold vs. Silver Campaign of 1896

The use of silver certainly means much to people in the West and if some of the theorists are correct, restoration of that form of money and wider use of it throughout the world is the remedy for our troubles.

Discussions similar to those heard today were carried on thirty-five years ago. The names of candidates and a brief resume of discussions follow. The "Ax" has no "ax to grind" and statements which follow are intended to be merely informative.

The candidates of the Republican Party in 1896 were Honorable William McKinley of Ohio for President and Honorable Garret A. Hobart of New Jersey for Vice-President.

The Democratic candidates were Honorable William J. Bryan of Nebraska for President and Honorable Arthur Sewall of Maine for Vice-President.

The People's Party nominated Honorable William J. Bryan of Nebraska for President and Honorable Thomas E. Watson of Georgia for Vice-President.

The candidates of the Prohibition Party were Honorable Joshua Levering of Maryland for President and Honorable Hale Johnson of Illinois for Vice-President.

The "Gold" Democrats nominated Honorable John M. Palmer of Illinois for President and Honorable Simon B. Buckner of Kentucky for Vice-President.

The Socialist Labor Party nominated Honorable Charles M. Matchett of New York for President and Honorable Matthew Maguire of New Jersey for Vice-President.

The candidates of the Free Silver Prohibition Party were Honorable Charles E. Bentley of Nebraska for President and Honorable James H. Southgate of North Carolina for Vice-President.

The Prohibitionists, Gold Democrats, Socialist Labor Party and Free Silver Prohibition Party did not receive a single electoral vote.

Chicago was the scene of several debates between Horr and Harvey. Horr represented the advocates of gold, while Harvey was an advocate of free coinage of silver.

Some pronouncements of statesmen of the day follow.

The Honorable John G. Carlisle, Secretary of the Treasury:

"Silver Advocates.—Their naked proposition is that the United States shall coin, at the public expense, for the exclusive benefit of the individuals and corporations owning the bullion, all the silver that may be presented at the mints into dollars worth about 51 or 52 cents, and compel all the other people in the country to receive these coins at a valuation of 100 cents each in the payments of debts due them for property sold, for labor, and services of all kinds.

"Utter Ruin.—But if free and unlimited coinage of legal tender silver at the ratio of 16 to 1 is established in this country a very large part of the money deposited in these various kinds of savings institutions will not be repaid in depreciated silver, but will be wholly lost, because such a reckless monetary system would precipitate a financial panic, which very few, if any, of the depositories could survive."

The Honorable Henry M. Teller, of Colorado:

"Mistakes.—Our first mistake was made in 1873, when we deprived ourselves of one-half the money metal of the world. The next great mistake was when the Bland bill came into the Senate from the House of Representatives as a free coinage measure, with then a divergency of only eight per cent between the silver and the gold in the markets of the world, that the Senate did not accept the House bill and give the world the benefit of free coinage in the United States. If you had done that there would be no silver question to trouble the world. If you had done that there would be no silver question to trouble you. The United States would have taken care of the surplus of silver until silver of the world, temporarily depressed by the action of Germany had reached its proper and original mint value.

"Cost of Gold Standard.—Our gold is being exported to Europe and will continue to be so exported. It will go in spite of us, and every day we seem to be putting ourselves in a worse position than heretofore. If we attempt to maintain the gold standard we must maintain it with the knowledge of what it is going to cost. I want the American people to know what it is going to cost. I do not believe the American people understand the danger which threatens not only their industrial pursuits, but the very existence of this nation as a free people by the gold standard."

In regards to hard times in 1893, various leaders attributed different reasons, as follows:

Andrew Carnegie.—"1. Natural reaction from excessive development of our material resources between 1880 and 1890.

"2. Almost equally potent—the agitation for lowering the standard of value.

"3. Unwise proposals of revolutionary changes in the tariff.

"Any one of these suffices; any two of them combined will bring disaster upon the most prosperous country, or most favorable conditions, that ever existed."

Washington Gladden.—"1. Extravagance.

"2. Extension of credit.

"3. Running in debt."

Ballington Booth.—"One cause, to my mind, which is responsible for the recent hard times in the United States, was the lack of confidence on the part of the general public in:

"1. The disposition of public men to deal with financial problems.

"In general, we Salvationists with many others believe that times would be much easier if the tremendous sums of money expended regularly in liquor, the theater, race-courses, card tables, etc., were turned into less selfish and more honorable channels. Not in charity particularly, but in reforming and gospelizing the masses, and in teaching them the methods of saving both soul and body, which in our humble opinion is the only kind of charity that is worth consideration."

John Swinton.—"It seems to me that three of the chief causes of bad times are:

"1. The blighting influence of the new millionairism.

"2. The shortage of brain and pluck among the masses.

"3. The extension of immorality in all branches of the government, and in political parties."

Judge Albion Tourgee.—"1. Overproduction.

"2. Uncertainty in the private mind as to the stability and operation of the present tariff.

"3. Great financial caution, engendered by the reckless talk of change and agitation indulged in by leaders of the Democratic party."

Senator Peffer.—"1. Private monopoly of the great and essential means and agencies of subsistence and comfort; as of land, fuel, food, commerce, transportation, money, etc.

"2. Displacement of labor by the use of machinery.

"3. Unequal competition resulting from combinations of men and means—the strong crowding out the weak."

Susan B. Anthony.—"The trouble with women is that, whether we have hard times or good times, they never get their just share of the much or the little of the good, and the work of my life has not been so much to find out the causes of men's failure to successfully manage their business affairs, as to try to show them their failure in attempting to make a successful government without the help of the women of the nation. There is money enough in this country today in the hands of the few, if justly distributed among the hard working, honest, and sober men and women, to make 'Good Times' for every one."

Samuel Dickie.—"Among the immediate causes tending to precipitate the panic of 1893, I would mention: (1) Credit inflation had reached and passed the point of danger. (2) A defeated party was filling the newspaper with prophecies of financial disaster. (3) The possibility of debasing our currency by free-silver legislation created a tendency to forced liquidation."

William M. Stewart, Editor of "The Silver Knight," gave the following reason: "Contraction of the volume of money of ultimate payment, which has produced falling prices, stagnation, and hard times."

John P. St. John.—"1. The demonetization of silver in 1873, and the dictation of our financial policy by Wall Street influences ever since.

"2. The perpetuation of the saloons, which are hot-beds of everything that is bad.

"3. Legislation which has enabled a favored few to absorb the wealth of the country as fast as the people produce it."

On the issues of the day:

The Honorable William McKinley: "The future is the sacred trust of us all, South as well as North. Honesty, like patriotism, can neither be bounded by State nor sectional lines. Financial dishonor is the threatened danger now, and good men will obliterate old lines of party in a united effort to uphold American honor."

The Honorable William J. Bryan: "We shall answer their demands for a gold standard by saying to them, you shall not press down upon the brow of labor this crown of thorns. You shall not crucify mankind upon a cross of gold."

Senator David B. Hill, of New York: "I am a Democrat, but I am not a revolutionist."

## RAILROAD PROBLEM

No. 1—A train is traveling 60 miles an hour. Everything connected with it, both animate and inanimate, is being carried along. A fly is encircling the head of a passenger on the train. The fly describes a circle three feet in diameter and is moving around it at the rate of four miles an hour. At what speed does the fly travel?

## GOOD-BYE, LITTLE CABIN

O dear little cabin, I've loved you so long,
And now I must bid you good-bye!
I've filled you with laughter, I've thrilled you with song,
And sometimes I've wished I could cry.
Your walls they have witnessed a weariful right,
And rung to a won Waterloo;
But oh, in my triumph I'm dreary tonight—
Good-bye, little cabin, to you!

Your roof is bewhiskered, your floor is aslant,
Your walls seem to sag and to swing;
I'm trying to find just your faults, but I can't—
You poor, tired, heart-broken old thing!
I've seen when you've been the best friend that I had,
Your light like a gem on the snow;
You're sort of a part of me—Gee! but I'm sad;
I hate, little cabin, to go.

Below your cracked window red raspberries climb;
A hornet's nest hangs from a beam;
Your rafters are scribbled with adage and rhyme,
And dimmed with tobacco and dream.
"Each day has its laugh," and "Don't worry, just work."
Such mottoes reproachfully shine.
Old calendars dangle—what memories lurk
About you, dear cabin of mine!

I hear the world-call and the clang of the fight;
I hear the hoarse cry of my kind;
Yet well do I know, as I quit you tonight,
It's Youth that I'm leaving behind.
And often I'll think of you, empty and black,
Moose antlers nailed over your door:
Oh, if I should perish my ghost will come back
To dwell in you, cabin, once more!

How cold, still and lonely, how weary you seem!
A last wistful look and I'll go.
Oh, will you remember the lad with his dream—
The lad that you comforted so?
The shadows enfold you, it's drawing to night;
The evening star needles the sky:
And huh! but it's stinging and stabbing my sight—
God bless you, old cabin, good-bye!

—Robert W. Service.

# The Shooting of Dan McGrew

A bunch of the boys were whooping it up in the Malamute saloon;
The kid that handles the music-box was hitting a jag-time tune;
Back of the bar, in a solo game, sat Dangerous Dan McGrew,
And watching his luck was his light-o'-love, the lady that's known as Lou.

When out of the night, which was fifty below, and into the din and the glare,
There stumbled a miner fresh from the creeks, dog-dirty, and loaded for bear.
He looked like a man with a foot in the grave, and scarcely the strength of a louse,
Yet he tilted a poke of dust on the bar, and he called for drinks for the house.
There was none could place the stranger's face, though we searched ourselves for a clue;
But we drank his health, and the last to drink was Dangerous Dan McGrew.

There's men that somehow just grip your eyes, and hold them hard like a spell;
And such was he, and he looked to me like a man who had lived in hell;
With a face most hair, and the dreary stare of a dog whose day is done,
As he watered the green stuff in his glass, and the drops fell one by one.
Then I got to figgering who he was, and wondering what he'd do,
And I turned my head--and there watching him was the lady that's known as Lou.

His eyes went rubbering round the room, and he seemed in a kind of daze,
Till at last that old piano fell in the way of his wandering gaze.
The rag-time kid was having a drink; there was no one else on the stool,
So the stranger stumbles across the room, and flops down there like a fool.
In a buckskin shirt that was glazed with dirt he sat, and I saw him sway;
Then he clutched the keys with his talon hands—my God! but that man could play!

Were you ever out in the Great Alone, when the moon was awful clear,
And the icy mountains hemmed you in with a silence you most could hear;
With only the howl of a timber wolf, and you camped there in the cold,
A half-dead thing in a stark, dead world, clean mad for the muck called gold;
While high overhead, green, yellow and red, the North Lights swept in bars—
Then you've a haunch what the music meant . . . hunger and night and stars.

And hunger not of the belly kind, that's banished with bacon and beans;
But the gnawing hunger of lonely men for a home and all that it means;
For a fireside far from the cares that are, four walls and a roof above;
But oh! so cramful of cosy joy, and crowned with a woman's love;
A woman dearer than all the world, and true as Heaven is true—
(God! how ghastly she looks through her rouge,—the lady that's known as Lou).

Then on a sudden the music changed, so soft that you scarce could hear;
But you felt that your life had been looted clean of all that it once held dear;
That someone had stolen the woman you loved; that her love was a devil's lie;
That your guts were gone, and the best for you was to crawl away and die.
'Twas the crowning cry of a heart's despair, and it thrilled you through and through—
"I guess I'll make it a spread misere," said Dangerous Dan McGrew.

The music almost died away . . . then it burst like a pent-up flood;
And it seemed to say, "Repay, repay," and my eyes were blind with blood.
The thought came back of an ancient wrong, and it stung like a frozen lash,
And the lust awoke to kill, to kill . . . then the music stopped with a crash.

And the stranger turned, and his eyes they burned in a most peculiar way;
In a buckskin shirt that was glazed with dirt he sat, and I saw him sway;

Then his lips went in in a kind of grin, and he spoke, and his voice was calm;
And, "Boys," says he, "you don't know me, and none of you care a damn;
But I want to state, and my words are straight, and I'll bet my poke they're true,
That one of you is a hound of hell . . . and that one is Dan McGrew."

Then I ducked my head, and the lights went out, and two guns blazed in the dark;
And a woman screamed and the lights went up, and two men lay stiff and stark;
Pitched on his head, and pumped full of lead, was Dangerous Dan McGrew,
While the man from the creeks lay clutched to the breast of the lady that's known as Lou.

These are the simple facts of the case, and I guess I ought to know;
They say that the stranger was crazed with "hooch," and I'm not denying it's so.
I'm not so wise as the lawyer guys, but strictly between us two—
The woman that kissed him and—pinched his poke—was the lady that's known as Lou.

—Robert W. Service.

### U. S. EMPLOYES BENEFIT FUND

The following claims were approved in March, 1931, at the Midvale Plant:

| | |
|---|---|
| Wilford Jensen, 14 days, final pay | $11.00 |
| Milo W. Pearson, 5 days, final pay | 2.00 |
| Leo M. Kemp, 9 days, final pay | 6.00 |
| Charles Madson Drown, 6 days, final pay | 6.00 |
| Nicholas Mazanes, 21 days, final pay | 18.00 |
| Ernest Cushing, relief | 25.00 |
| John E. Eskelson, 30 days, final pay | 27.00 |
| George Markus, Jr., 10 days, final pay | 7.00 |
| George Bird, 25 days, final pay | 22.00 |
| Jesse Buhler, 6 days, final pay | 3.00 |
| Thomas Alexander, 25 days, final pay | 22.00 |
| Joe Zageric, 58 days, part pay | 55.00 |
| Nicholas Mazanes, 14 days, part pay | 14.00 |
| Arthur Cundick, 6 days, final pay | 3.00 |
| Peter Fourkas, 6 days, final pay | 3.00 |
| Salvador Martinez, 29 days, final pay | 26.00 |
| Total | $250.00 |

## Coal Dust from Hiawatha, Mohrland and Panther

**J. G. REESE, Correspondent**

The Hiawatha Junior High School basketball team defeated the leading Helper team at Hiawatha with a score of 19 to 17. The Helper Junior High School girls' team defeated the Hiawatha team 4 to 3. This is the first defeat of the Helper boys' team this year and it was a very hard-fought game.

The Hiawatha Parent-Teacher Association gave a Lincoln program in the Amusement hall to over 300 people last night. A one-act play by the pupils of the eighth grade, a dancing skit by Mary Dell Russell and kindergarten pupils, and a cabaret scene by grown-ups, made up one of the largest and best programs put on by this association. Dancing concluded the evening's entertainment.

The Rossiter Raymond Memorial Library of Hiawatha, which is sponsored by the Women's Auxiliary of the American Institute of Mining and Metallurgical Engineers, received a copper plate and framed photograph of Rossiter Raymond who founded these libraries throughout the United States.

### THE WINNER

If you think you are beaten, you are;
If you think you dare not, you don't,
If you think you'd like to win, but you can't,
It's almost a "cinch" you won't;
If you think you'll lose, you've lost,
For out in the world you'll find
Success begins with a fellow's will—
It's all in the state of mind.

Full many a race is lost
Ere even a race is run,
And many a coward fails
Ere even his work's begun.
Think big, and your deeds will grow,
Think small and you fall behind,
Think that you can, and you will;
It's all in the state of mind.

If you think you are outclassed, you are;
You've got to think high to rise;
You've got to be sure of yourself before
You can ever win a prize.
Life's battle doesn't always go
To the stronger or faster man;
But sooner or later, the man who wins
Is the fellow who thinks he can.

—Author Unknown.

# Salt Lake City Office Notes

**W. W. RAGER, Correspondent**

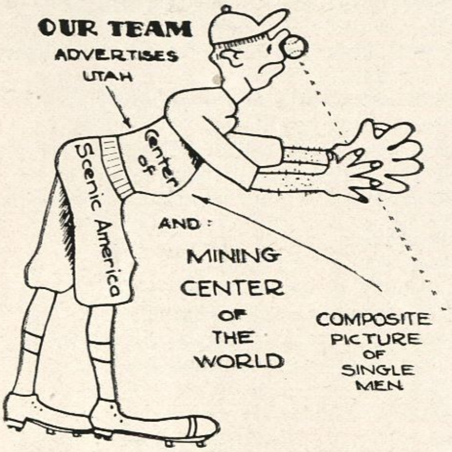
Utah's typical spring is here, and the golfers are in their seventh heaven. Everywhere you hear the usual alibis, "not in condition," etc.

Garden time and flower time are also here and a number of the Salt Lake office staff are busy planting gardens.

Mrs. Ida L. Young, stenographer to Mr. Ledyard and Assistant Editor of the Ax-I-Dent-Ax, has resigned and moved onto a big ranch recently purchased by her father near Twin Falls, Idaho. Her position has been filled by Miss Virginia M. Baker.

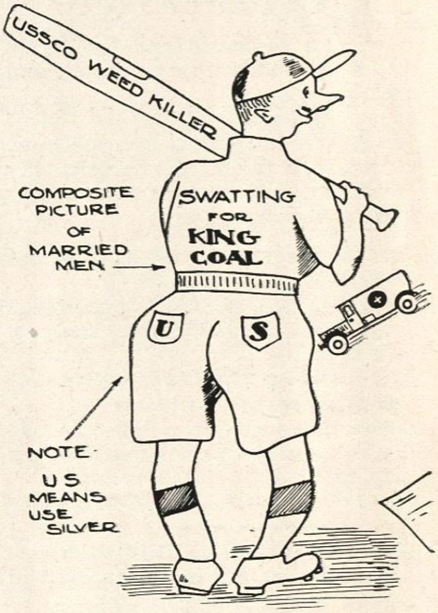
The Salt Lake office force has divided itself into two groups, the "singles" and the "doubles" and will seek the baseball diamond on Saturday, the 18th, to decide which class can play the better baseball. Some rare sport is promised since some of the players have not participated in a ball game for many years. If any of the players survive, it is planned to challenge the Midvale office force at the earliest possible date.

The revival of baseball brings back recollections of the days when the Salt Lake City office had a regular baseball team. When a game was played the entire office force would attend, families and all, and cheer the players. That was before the auto came into general use, along about 1910. Soon after golf became common and now we have midget golf and the talkies. The players on the old team are scattered to the four winds—some have passed on.



The line-up for the game Saturday, April 18, was as follows:

Single Men: "Brick" Treharne, C. F.; "Muddy" Smith, C.; "Sonny-Boy" Averson, R. F.; "Honus" Rager, S. S.; "Lightfoot" Granberg, L. F.; "Friar" Clough, 3-B.; "Dark-Horse" Watson, 1-B.; "Ginger" Rogers, 2-B.; "Alex the Great" Logan, P.; "Fuzzy" Fulmer, Utility, and A. L. Logan, Captain.



Married Men: "Jumpin' Joe" Morgan, 3-B.; "Smilin' Jim" Busby, C. F.; "Tony" Margetts, 2-B.; "Rabbit" Meyer, S. S.; "Ty" Eardley, L. F.; "Truck" Harris, C.; "Tubby" Billings, R. F.; "O. O. the Great" Victor, 1-B.; "Wild Bill" Russell, P.; "Big Six" Johnson, P.; "Pie" Anderson, Utility; "Duffy" Vent, Utility; "Altrock" James, Utility; "Babe" Mountford, Utility, and F. X. Meyer, Captain.

### SAD NEWS FOR THE BENEDICTS

Just as the sun was casting its last shadows over the Oquirrh Range and the grandstand, where the pulchritude of the company were riveting their eyes on the slippery grass diamond, the bachelors emitted a war whoop of victory. The final score was 16 to 8 in favor of seven single men and the two married men who played with them.

# The Railroad Crossing

I can't tell you much about the thing, 'twas done so powerful quick,
But pears to me I got a most outlandish heavy lick;
It broke my leg, and tore my skulp and jerked my arm most out,
But take a seat; I'll try and tell how it kem about.

You see, I'd started down to town with thet ere team of mine,
A haulin' down a load o' corn to Ebenezer Kline,
An' drivin' slow; for just about a day or two before
The off horse run a splinter in his foot and made it sore.

You know the railroad cuts across the road at Martin's Hole;
Well, there I see a great big sign, raised high upon a pole.
I thought I'd stop and read the thing, and find out what it said,
And so I stopped the horses on the railroad track and read.

I ain't no scholar, rekellect, and so I had to spell.
I started kinder cautious like, with R A I and L;
And that spelt "rail" as clear as mud; R O A D was "road."
I lumped 'em, "railroad" was the word, and that 'ere much I knowed.

C R O and double S, with I N G to boot,
Made "crossing" just as plain as Noah Webster dared to do.
"Railroad Crossing"—Good enough; L double O K, "look."
And I was lookin' all the time and spellin' like a book.

O U T spelt "out" jest right; and there it was, "Look out."
It's kinder cur'us like to know just what 'twas all about.
F O R and T H E 'twas then "Look out for the"
And then I tried the next word, it commenced with E N G.

I'd got that fur when suddenly there came an awful whack;
A thousand fiery thunderbolts, just scooped me off the track;
The harness went to Davey Jones, the wagon went to smoke,
And I was histed seven yards above the tallest oak.

I didn't come to life again fur about a day or two;
But though I'm crippled up a heap, I sorter struggled through.
It ain't the pain, no, 'tain't the loss of that ere team of mine,
But stranger, how I'd like to know the rest of that ere sign.
—Contributed by Utah Railway.

# Silver

Silver is one of the most ancient and historical metals known and the most widely used for many purposes. While it was discovered later than gold or copper, silver mines in Asia Minor at Larium and Hissarlik were worked thousands of years ago. When the Roman Empire was at its height, most of the silver used then was obtained from Spain. When America was discovered and controlled by Spain, that nation rejuvenated the commerce of the world through silver obtained from its new possessions. Pachuca silver has been used throughout the world for hundreds of years.

Silver was called Luna and Diana by the Alchemists. The term, lunar caustic, synonym for silver nitrate, perpetuates this ancient appellation. The crescent moon was the symbol used by ancients for silver and it is fairly possible that there is some connection between that symbol and the necklace pendant so highly revered by the Navajos.

Considered as a mass, silver is the whitest of all metals and the most malleable and ductile of all metals except gold. More than a mile of wire can be drawn from a gram of silver and the silver in an ordinary dime can be drawn into nearly two and one-half miles of fine wire. Hammering and rolling silver hardens it but malleability can be restored by annealing it with moderate heat. Silver is the best conductor of heat and electricity. It melts at 960.5 degrees centigrade and "boils away" at about 2,000 degrees centigrade. It is easily dissolved with nitric acid of any strength and may also be "solved" with hot strong sulphuric acid. Hydrochloric acid acts on the surface of silver only, and further reduction is arrested through the formation of an outside coating of silver chloride.

In medicine silver is used principally in the form of silver nitrate which compound is used directly and in various combinations by physicians.

The principal use of silver has been for coins, ornaments and jewelry. As indicated in Mr. Eardley's article it has been the principal medium of exchange all over the world since people began to barter with each other. It has distinct advantages over gold on account of its lesser value, permitting it to be used for coins of smaller denominations than gold coins, and a like advantage over nickel, copper or bronze on account of its greater value and non-oxidizing property. On account of its enduring quality and indestructibility under ordinary conditions, it has a great advantage over paper money.

White gold is considered by some as of recent origin, but this mixture of gold and silver was well known to the ancients under the name of electrum. The ancient Greeks and Italians used electrum for vessels, coinage, personal ornaments and even arrows.

The Egyptians were highly skilled in fabricating silver into ornaments, jewelry and coins. The Romans continued the work of the Egyptians and enriched the silversmith's art through the production of large pieces of plate, some weighing more than 10,000 grams. Jewelry also had its place among the Romans and silver was fabricated into chains, bracelets, rings, pins and various other personal ornaments. Spain, England, Germany, Holland, Russia, Hungary, Austria and Poland added to the richness of early designs and created many new pieces.

When the Spanish invaded Mexico and South America and even the southern part of what is now the United States, they found great quantities of silver and a well developed silversmith industry. Artisans among these North American people were skilled in working silver; the Castilians did not add much to the mechanics of silver working but gave them some new ideas and designs.

In ancient China gold was exceedingly scarce and silver was the principal precious metal fabricated. In India the work of silversmiths has been a prominent part of industrial life there for thousands of years.

The history of silver fabricating in America began with Robert Sanderson, who learned the trade as a silver craftsman in London and settled in Boston about 1640. John Hull became a partner of Sanderson and as a result of their tutelage more than 150 silversmiths were trained in Boston before 1800. Paul Revere was a silversmith who attained prominence as an artisan before Longfellow immortalized him as a hero.

Due to current low prices of silver, interest in it is being revived and silver is now being extensively used in Europe in plating tubes and various other equipment used in laboratories. Some pieces of laboratory apparatus weighing as much as 300 or 400 pounds have been made entirely from pure silver during the past year. —E.M.L.